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FEDERAL NUCLEAR FACILITIES ENVIRONMENTAL RESPONSE ACT

HEARING

BEFORE THE

COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS UNITED STATES SENATE

ONE HUNDRED FIRST CONGRESS

SECOND SESSION

ON

S. 1462

A BILL TO CREATE A FEDERAL NUCLEAR FACILITY ENVIRONMENTAL RESPONSE FUND, TO CREATE AN OFFICE OF ENVIRONMENTAL MANAGEMENT AND REMEDIAL ACTION, TO REQUIRE THE SECRETARY OF ENERGY AND THE ADMINISTRATOR OF THE ENVIRONMENTAL PROTECTION AGENCY TO COOPERATE WITH AFFECTED STATES AND INDIAN TRIBES, TO PROVIDE FOR RESEARCH AND DEVELOPMENT TO ADDRESS ENVIRONMENTAL PROBLEMS AT FEDERAL NUCLEAR FACILITIES, AND FOR OTHER PURPOSES

MAY 17, 1990

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CONTENTS

OPENING STATEMENTS

Page

Burdick, Hon. Quentin N., U.S. Senator from the State of North Dakota 1
Chafee, Hon. John H., U.S. Senator from the State of Rhode Island 19
Metzenbaum, Howard M., U.S. Senator from the State of Ohio 17
Reid, Hon. Harry, U.S. Senator from the State of Nevada 19
Warner, Hon. John W., U.S. Senator from the Commonwealth of Virginia 2

WITNESSES

Adams, Hon. Brock, U.S. Senator from the State of Washington 15
Duffy, Leo P., Director, Office of Environmental Restoration and Waste Management, Department of Energy 2
  Prepared statement 27
Lowery, Leon, legislative representative, Environmental Action 12
  Prepared statement 71
Pollet, Gerald M., executive director, Heart of America Northwest 10
  Prepared statement 55
Silver, Dan, Special Assistant to Gov. Booth Gardner, Governor, State of Washington 8
  Prepared statement 38
  "Defense Waste Cleanup: A Proposal For A National Solution" 46
Wirth, Hon. Timothy, U.S. Senator from the State of Colorado 5
Additional material:
  General Accounting Office, statement from 82
  S. 1462 96

FEDERAL NUCLEAR FACILITIES ENVIRONMENTAL RESPONSE ACT

THURSDAY, MAY 17, 1990

U.S. SENATE,
COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS,
Washington, DC.

The committee met, pursuant to notice, at 9:57 a.m. in room 406, Dirksen Senate Office Building, Hon. Quentin N. Burdick (chairman of the committee) presiding.

Present: Senators Burdick and Warner.

OPENING STATEMENT OF HON. QUENTIN N. BURDICK, U.S. SENATOR FROM THE STATE OF NORTH DAKOTA

Senator BURDICK. Good morning. The Committee on Environment and Public Works is meeting today to hear testimony on S. 1462, the Federal Nuclear Facilities Environmental Response Act as introduced by Senator Adams.

The bill would establish a dedicated trust fund to finance cleanup, compliance, and waste management activities at Federal Nuclear facilities. These facilities are mostly operated by the Department of Energy.

The trust fund would be financed by the agencies and private persons using DOE's nuclear services. General appropriation will be used to finance activities that could not be apportioned to specific agencies.

The bill would also establish a new office of Environmental Management and Remedial Action. This office would carry out, under a centralized program, DOE Environmental Management and Remedial Action activities. The office would be headed by an Assistant Secretary.

Cleaning up the DOE facilities must be a long terminal national commitment. The cleanup will take a lot of time and a lot of money. We must be persistent in action, but patient with results.

Environmental compliance and cleanup must be a high priority for DOE and Congress. It is as important as the other missions of DOE. It is up to both the Congress and the agencies to provide enough funding to do the job.

S. 1462 is designed to make environmental cleanup and compliance a high priority for DOE and to provide a way to fund these actions.

At this time I would like to welcome our colleague, Senator Adams, to the hearing. Senator Adams is to be commended for his leadership and efforts on this bill. He has worked hard to keep clean, and to help cleanup nuclear facilities. I'd also like to welcome Senator Wirth to our Committee. Senator Wirth has been a leader on environmental issues as well. He has been particularly effective on issues involving the cleanup of DOE and other Federal facilities.

I look forward to his comments and testimony of other witnesses as well.

Senator Warner.

OPENING STATEMENT OF HON. JOHN W. WARNER, U.S. SENATOR FROM THE COMMONWEALTH OF VIRGINIA

Senator **Warner**. Thank you, Mr. Chairman.

I commend you, Mr. Chairman, and our colleagues, for instituting this hearing on this very important piece of legislation.

Mr. Chairman, as you may recall, I serve on the Armed Services Committee where we review the DOE budget—that is portions of it as relating to the weapons program—and my concern is two fold here. We must go forward, but we want to be very careful not to raise expectations beyond the availability of the technical expertise to do this quantum of cleanup, and the willingness of the Congress to, in a timely manner, appropriate the funds needed to pay the bills.

We also must take into consideration the other cleanup programs going on by the States. It seems to me that we're coming onto this scene not a minute too late all across America to do the cleanup programs, and private industry is gearing up as fast as they can to meet the challenges and to take up their respective load of work, together with the States. Now, of course, it's the Federal Government's responsibility.

But let us bear in mind that as we approach this challenging task for all Americans, not to raise expectations beyond the availability of the technical expertise to do the job and the willingness of the Congress to appropriate, in a timely fashion, the funds that are required.

I thank the Chairman, and I regret that I'll not be able to be here for the remainder of the hearing.

Senator **Burdick**. Our first witness will be Mr. Leo Duffy, director of the Office of Environmental Restoration and Waste Management, U.S. Department of Energy, Washington, D.C.

Welcome to the Committee, Mr. Duffy.

STATEMENT OF LEO P. DUFFY, DIRECTOR, OFFICE OF ENVIRONMENTAL RESTORATION AND WASTE MANAGEMENT, DEPARTMENT OF ENERGY, ACCOMPANIED BY PAUL GRIMM, DEPUTY DIRECTOR

Mr. **Duffy**. Good morning, Mr. Chairman.

I have with me Paul Grimm, my deputy, and I appreciate this opportunity to appear before you this morning to discuss S. 1462, the Federal Nuclear Facilities Environmental Response Act. The Department supports many of the concepts in S. 1462 because they are, in larger part, consistent with many of the initiatives that the Secretary has already undertaken to address the potentially serious environmental concerns. I am here today, however, to tell the members that the Department does not believe S. 1462 should be enacted at this time. We believe that the need for S. 1462 has been surpassed by the actions of the Secretary which I'll discuss.

Secretary Watkins is firmly committed to achieving and maintaining strict compliance with the laws, regulations, and agreements aimed at protecting human health and the environment. To achieve this objective the Secretary directed preparation of the Environmental Restoration and Waste Management five year plan as a means of consolidating and coordinating DOE cleanup and waste management activities. The five year plan sets a precedent for treating these important environmental activities as a unified national program. Perhaps just as importantly, the plan establishes a baseline against which progress can be measured.

The Secretary established a new line organization, the Office of Environmental Restoration and Waste Management, to implement the five year plan, and appointed me to serve as its first director. Consistent with S. 1462, he has indicated his intention of establishing an Assistant Secretary for Environmental Restoration and Waste Management to more appropriately recognize the responsibilities of this office.

The first annual update of the five year plan is scheduled for publication in June. We will add a new section of Technology Development to direct scientific and engineering resources to meet the environmental cleanup and waste management needs. It also outlines the Transportation Management requirements. These two areas are specifically identified in S. 1462, but were not included in the initial five year plan.

For these additions, the scope of coverage of the five year plan closely matches the provisions of S. 1462.

Consistent also with the approach contained in S. 1462, the Department of Energy is involving State and tribal governments, State oriented organizations like the National Conference of State Legislatures, the National Governors Association, and the National Association of Attorney Generals in developing the plan. The technical content and approach is reviewed by the National Academy of Sciences, and DOE solicits comments from EPA and OMB on its plans and has attempted to address the concerns expressed by these groups.

We have expanded our external review group for 1992 and we are extending formal involvement to local communities in review of the site's specific implementation plans.

This commitment to directly involve affected States, Indian nations, Federal agencies, and other local public interest groups is clearly in line with the objectives of S. 1462.

To formalize the commitment of the Congress and the Administration to fund cleanup work adequately, the Department's fiscal year 1991 budget proposes the establishment of a separate appropriation account from which all DOE restoration and related technology development efforts will be funded. This focused approach should aid congressional oversight and examination of the five year plan funding requirements and should help ensure that the funds meant for cleanup are allocated according to risk based priorities.

I will now briefly summarize specific comments on the major provisions of S. 1462. A more detailed analysis is contained in my written statement, which I'm submitting for the record.

We believe that S. 1462 would significantly complicate the sequence of present budgeting requirements which exist today as a result of the Secretary's reorganization of the Department of Energy. The present methodology, although complicated, is straight forward, well understand, and accountable to Congress. The bill would impose, for instance, a new consultation and concurrence process with organizations with potentially conflicting objectives and priorities. This is a marked departure from the normal budgetary process and could delay high priority cleanup work. Moreover, it would require the development of an interagency conflict resolution methodology, imposing a significant administrative burden to an already complicated budgetary process.

The Department is concerned that S. 1462 could unfairly make DOE contractors liable for actions outside of their control, the acts of previous contractors, the Department of Energy's inadequate management oversight, or the lack of sufficient funding to appropriately meet environmental requirements. I agree that clear distinction must be drawn on the responsibilities and liabilities of DOE contractors, but this should be reflected through amendments to existing contractual arrangements and through the promulgation of new rules that establish contractor liability policies with public input. At the hearing on May 23rd the contractors will identify their concerns on DOE's recent rule making publication.

S. 1462, if enacted would also add new program requirements which, in our view, cannot be met under the schedule as contained in the bill. For example, completion of the environmental baseline survey with DOE nuclear facilities in one year and subsequent completion of site-specific compliance plans within six months or thereafter is not possible. In fact, certain of our compliance agreements of remedial investigation plans have taken over 15 years. Instead of waiting for the completion of comprehensive baseline surveys perhaps years in the future, DOE is already moving ahead through the Secretary's five year planning initiative and his ten point plan.

Other S. 1462 requirements may conflict with concurrence processes developed pursuant to Circular A–106, for instance, or may require actions and schedules which fail to allow for completion, such as DOE initiatives as the preparation of the programmatic environmental impact statement.

S. 1462 would require the Secretary to allocate a proportionate share of costs among the Departmental organizations for cleanup. We believe this objective has been attained, in a large part, through the establishment of the new Environmental Restoration and Waste Management organization. This office has responsibility, as a primary mission, for establishing a budget which identifies cleanup requirements for the DOE facilities under the Secretary's jurisdiction.

S. 1462 would also require agreement with EPA on technology development. The Department of Energy and EPA have already executed a memorandum of agreement to coordinate and jointly sponsor research and development, waste management, and environmental restoration areas. At present there is $2 million of funding allotted for the efforts with EPA in these mutual areas of interest.

This relationship, although important, does not represent the full extent of cooperative activities with other Federal agencies. My prepared statement identifies examples of collaborative research to explore solvent substitution, applications for waste management, development for new technologies for characterization, to perform needed cost and project validations, and to develop non-intrusive sensing of contaminant flows in aquifers and to utilize remote sensing of contaminants.

DOE is also funding cooperative agreements providing grants to nonprofit entities and Universities and funding contracts to stimulate cleanup, environmental restoration, and research and development.

In conclusion, Mr. Chairman, the Department considers that the actions taken by the Secretary in reorganizing the Department—clearly identifying responsibility for environmental restoration and establishing a single budget authority for the implementation of this program—we believe that these actions obviate the need for the new legislation at this time.

I would be pleased to work with the staff in reviewing our points and clarifying them.

This completes my remarks.

Senator BURDICK. I think when other members of the Committee are present, they may want to ask you some questions. You'll be available for a short time, would you not?

Mr. DUFFY. Yes, I'll be available.

Senator BURDICK. Fine.

Now we'll hear from our colleague, Senator Wirth.

STATEMENT OF HON. TIMOTHY E. WIRTH, U.S. SENATOR FROM THE STATE OF COLORADO

Senator WIRTH. Thank you very much, Mr. Chairman. I'm pleased to be here, and I'm sorry that Senator Adams is not here. He will provide, I know, a very cogent and thorough response concerning S. 1462, the Federal Nuclear Facilities Environmental Response Act.

What we're trying to do, Mr. Chairman, and the basic issue before is, how in the world are we going to find the money to clean up an increasing burden around the country? We see in Rocky Flats—which is in my backyard, as you know—a very, very significant issue, an issue of deep concern to the people there. They are asking themselves, "Well, if Rocky Flats is going to start up again, then that's one commitment of money that's going to be over here. Where is the money going to come from for cleaning up?"

In the budget this year is some $89 million for cleaning up Rocky Flats, even though the Department of Energy says that what they really need to do the job is more than $200 million. That's for this year only. We look long term at the size and scope of the problem. We were told two years ago by the Department of Energy that the cleanup problem was a $100 billion dollar problem. That has escalated now to estimates anywhere from $150 billion—and rising—in terms of the cost after the nuclear weapons establishment.

We have seen what kind of a problem the Savings and Loan bail out is causing to the budget overall. Why do we expect that there's going to be even less pressure that comes from the nuclear weapons cleanup problem? The question is, where are we going to find the money?

There are a number of proposals out there, none of which I think—with all due respect to Secretary Watkins and his able staff—there are a number of proposals out there and we're just going to have to figure out a better way of raising the ante very significantly. This legislation introduced by Senator Adams is one way of doing it. There might be another way of doing it which would be to look at the DERA precedent set in the Defense Department in the mid 1980s in which we set aside a very significant account for cleanup in the Department of the Army and elsewhere.

We are fooling ourselves, Mr. Chairman, if we believe that we can continue to go ahead, in a nickel and diming kind of fashion, attempting to cleanup these places without the long term commitment of the enormous amount of money that it's going to take.

I have a full statement in support of the Adam's legislation which I would like to have included in full in the record, if I might.

Senator BURDICK. Without objection, it will be received.

Senator WIRTH. Thank you, Mr. Chairman.

I am a cosponsor of that legislation, not necessarily because I believe that it is absolutely the right way of doing it, but what it does is to lay down a marker and says that we have a huge problem out there. If our finances in this country were rocked by $300 billion to the Savings and Loan crisis over a 30 year period of time, how further rocked are we going to be with at least $150 billion for the cleanup of the nuclear weapons establishment.

I thank you very much, Mr. Chairman, for allowing me to come in and testify and to share the podium with Mr. Duffy who does such a good job for DOE. I know it's a very easy job.

[Laughter.]

But we appreciate the very careful attention that he's giving to this issue.

I thank you, Mr. Chairman.

[Senator Wirth's statement follows:]

STATEMENT OF HON. TIMOTHY WIRTH, U.S. SENATOR FROM THE STATE OF COLORADO

Mr. Chairman, members of the Committee, I am pleased to appear before you today to testify on what is one of the most urgent and critical needs in my state of Colorado and around the Nation: dealing with the enormous environmental mess in the nuclear weapons complex.

Senator Adams has already provided a cogent review of the key provisions in S. 1462, the Federal Nuclear Facilities Environmental Response Act, so I will limit my remarks to several observations on the role and importance of this legislation. Before doing so, however, I would like to commend Senator Adams for his leadership on this issue and his dedication to the people in the state of Washington and around the country who are affected by mismanagement in the nuclear weapons plants.

First, it is clear that we have an enormous liability in environmental clean-up, safety and health in the nuclear weapons complex. The cost of rectifying past problems and bringing the nuclear weapons complex into compliance with environmental laws range as high as $150 billion over the next 30 years. This national scandal is not quite of the magnitude of the S&L debacle, but almost. And it threatens lives, not just livelihoods, as was evidenced in the recent discovery of 62 pounds of plutonium dust in the ventilation ducts at Rocky Flats.

Secondly, it is becoming increasingly clear that the federal government is broke. Annually, we borrow almost $300 billion to meet our obligations. For the forseeable future, there will be continuing pressure to reduce federal spending, including defense spending—of which the DoE budget is a part.

Given these two trends, it seems to me imperative that we begin in earnest a debate on how to assure that adequate funding and attention will be paid to clean-up, long-term care and decommissioning in the nuclear weapons facilities operated by the DoE. S. 1462 provides a catalyst for this critical debate by proposing that the all beneficiaries of DoE's nuclear weapons complex pay a "user fee" to a trust fund dedicated to environmental corrective and remedial actions at affected facilities. This fund is modeled in part on the fund created in the 1982 Nuclear Waste Policy Act and in part on the CERCLA Superfund.

Such a fund is necessary to ensure that continuing adequate resources are made available for environmental clean-up and management in the nuclear weapons complex. We have already seen the potential for underfunding environmental clean-up in the DoE's FY1991 budget submission. Only $89 million in clean-up funds for Rocky Flats was requested, less than is necessary by DoE's own admission to reach the clean-up targets and schedule agreed with the State of Colorado. DoE's Rocky Flats Area Office estimated it would need $208 million for clean-up and waste management needs in FY91—more than twice the Administration's request.

The environment fund created in S. 1462 would help isolate clean-up decisions and funding from competition with production and other programs. Workers and communities involved in the nation's nuclear weapons plants desire at least this assurance.

S. 1462 is also necessary as a means of imposing greater analytic discipline in environmental management within DoE. Today, DoE does not disaggregate its line-item budget requests sufficiently to determine how much money is being requested for environmental actions. The methodology envisioned in S. 1462 would help get a much better handle on the accounting of cost allocation for remedial actions.

The proposed legislation would help put Rocky Flats—and all other DoE nuclear facilities—on a more secure path towards environmental restoration and management. The problem of waste shipments at Rocky Flats, for example, has been in part due to the fact that there hasn't been an internal DOE program to ensure that waste aspects of the nuclear complex were given priority. Permanent disposal capability was left as something to deal with down the road, resulting in a series of interim stop-gap measures. Colorado needs to get away from the stop-gap approach that relies on temporary solutions. The bill would institutionalize a program within DOE to deal with the waste disposal issue. It would have assured funding, independent management controls and independent input from affected states.

Over the long term, we must make sure the money is in the bank to decommission and decontaminate Rocky Flats when that time comes. There is enormous demand on the DOE budget at many sites all around the country, and costs are projected at more than $150 billion. Eventually, Rocky Flats will need a good portion of this money. This bill is one way to make sure that the commitment and dollars are there when we need them.

The bill is not a job retraining program or economic compensation program for facilities that are shut down, although site clean-up and decommissioning will provide transitional employment for large numbers of workers with nuclear experience. In this way, the bill does provide a sort of conversion insurance program. To the extent that we have a program in place that provides automatic funding for clean-up, we provide a guarantee of continued activities at the site in the clean-up process.

Without a bill like this, DOE might shut down the facility, but not get around to clean up for years while it tries to scrape together adequate funds. Historically, we had dislocations of workers in such shutdowns. The bill by its nature would allow DOE to proceed directly into the clean up phase. For many sites this is an important economic "countercyclical" program. When a shut down of production comes workers are looking for shifts to clean up employment. The bill seeks to ensure that the money will be there without delay.

An additional feature of S. 1462 is the role foreseen for states in working with DoE on clean-up and remediation of DoE sites. Affected states—and through them, local communities—would be eligible for assistance grants from the fund. This is especially important to Colorado and to the communities, such as Broomfield, located adjacent to Rocky Flats.

Finally, I would note that the funding levels in the bill for the first few years were proposed before the Secretary of Energy proposed the first version of the five-year plan, and have now been overtaken by events. We all recognize that the actual

funding levels for the last year and this year will be significantly higher due to action by Congress. When this bill is enacted, those provisions should be adjusted accordingly to reflect the current estimates of funding requirements.

I thank the Committee for its attention to this critical legislation.

Senator BURDICK. I thank you.

Our next witness will be Mr. Dan Silver, Special Assistant to the Governor, on behalf of the Governor of the State of Washington.

STATEMENT OF DAN SILVER, SPECIAL ASSISTANT, ON BEHALF OF HON. BOOTH GARDNER, GOVERNOR, STATE OF WASHINGTON

Mr. SILVER. Thank you, Mr. Chairman. Good morning.

I am Dan Silver, an aide to Governor Booth Gardner from the State of Washington. I'd like to say, Mr. Chairman, how much we appreciate your invitation to us to come back here this morning and testify on behalf of the Federal Nuclear Facilities Environmental Response Act. I would like to say, as well, how much we appreciate the leadership that Senator Adams has shown on the Hanford cleanup issue, not simply in this bill, but in the appropriations process and just in general in terms of trying to get control of this nuclear waste issue.

It's really true, I think, that the national effort, while we have so much attention on the nuclear facilities, is relatively new in terms of moving forward on the cleanup of those facilities.

In our State, in the winter of 1988, Governor Gardner and Governor Goldschmidt met with the Heart of America in Seattle to work through some ideas for a national cleanup program. They subsequently met with their fellow governors in 10 States across the country. Those governors laid, in April of 1989, a proposal before Secretary Watkins which they called a national solution, a proposal for national solutions. That included Governor Gardner, Governor Andrews, Governor Caruthers, Governor McWherter, Governor Campbell, Governor Celeste, Governor Goldschmidt, Governor Romer, Governor Miller, and Governor Wilkinson. With your consent, Mr. Chairman, we would like to have a copy of that proposal from 1989 included as part of our comments.

Senator BURDICK. Without objection, it will be received. (See p. 46.)

Mr. SILVER. Thank you.

The Governors' paper identified a number of points that we thought should be included in any national campaign to clean up the nuclear facilities sites. Those include: a detailed schedule and national priority system, consistent with negotiated cleanup agreements; sufficient long term stable funding to ensure the cleanup and disposal of existing and future wastes—which I think is at the heart of the bill before you today; an effective regulatory structure, including both State and independent oversight and enforcement—I believe that issue is before you in another bill, S. 1140, on which you recently took testimony; the means to build and maintain public confidence—which is as critical to us in Washington State as any other part of this legislation; the development of advanced technologies to ensure the safe, thorough, and cost effective waste cleanup of the Hanford Reservation; a long term waste disposal program; and responsible participation by and funding of affected States.

This bill which Senator Adams has put before you has taken these ideas that the 10 governors have, these concepts, and written them into national law—at least that is our aim.

We have had a very good working relationship with Secretary Watkins. He has certainly been a breath of fresh air for the Department of Energy. We have a high regard for the Secretary. Shortly after receiving this paper from the 10 governors, he invited each of them to send a representative back to the five year clean up program planning process. He invited other members from States across the country to participate. Not only did he invite us to participate, he actually paid attention to what we had to say and adjusted his plan accordingly. He has met with us repeatedly.

Recently he has sent out his representatives in a tiger team review of the Hanford Reservation. Again, he has invited close participation by the State in review of the Hanford safety and environmental problems. So we have a very high regard for the Secretary and for what he is intending to do.

Secretary Watkins is not going to be Secretary of Energy forever. The present folks are not going to be there forever. But this problem is going to be there, as Senator Adams reminds us in his bill, for at least the next 30 years. We need to institutionalize the arrangements which Mr. Duffy and the Secretary have been talking about for the last year. Only the Congress can do that. Only the Congress can bring the force of law onto those issues.

The importance of the trust fund to us is, principally, in order to maintain and protect the public confidence that, in fact, we, as a society, intend to do something about the nuclear waste that is in our States. The trust fund would establish, in law, a mechanism to provide us a stable, sufficient, long term source of funding tied to a 30 year performance. If the public cannot believe Tri-Party Agreement which we have recently negotiated in Washington State, then we have a very little capacity, as a State, to work with the Federal Government over decades.

This bill reflects the value that the environmental costs of handling nuclear wastes are a true cost of doing business by the Federal Government. Those costs must be borne by the parties creating the wastes. They are not, of course, the responsibility of the States, but it is a responsibility of the Federal Government. We cannot continue to push off this problem to future generations as we have had this problem pushed off to us.

This trust fund, if it is properly put together, will also help to control costs. We have recently been working with Mr. Duffy and with the Environmental Protection Agency on an independent budget review of the Hanford budget figures. They are escalating at an alarming rate. We are trying our best to gain control of those costs and to understand where they're coming from and why they're escalating. We think that in order to maintain public confidence in the budget process, that a similar mechanism needs to be written into this bill.

We are all too familiar, out in Washington, with the phenomena of escalating costs on the Hanford Reservation which we went through earlier in the 1980s with the WPPSS phenomenon. We would not want a repeat of that on environmental waste cleanup.

The second most important part of this bill, to us, is the emphasis it places on research and development. We desperately need new technologies to deal with the Hanford waste. For example, at the Hanford tank farms, we simply do not know all of the contaminants that are in the tanks. We do know that they are leaking. They have leaked, and we do know that they are potentially explosive. But we lack today the technologies to get the waste safely out of those tanks and safely disposed.

We believe the Secretary's argument, and Senator Adam's argument, that we can help to control the costs if we put an increased reliance on research and development. For example, the Pacific Northwest Laboratories has established a process where they are able to solidify the soils which contain nuclear waste so that those wastes no longer move through the ground water toward the Columbia River. We are currently exploring a process for using the Fast Flux Test Facility to change high level wastes into low level wastes. If we can transform waste from high level to low level waste it is very much cheaper for us to handle and, in fact, the technology is quite available to control the level of waste.

The third important item of this bill to us is the grants that come to the States and tribes, not simply to pay for the regulatory costs which are coming to us, but an important part of this bill is that it would provide funding for the transportation planning, the actual transportation of waste from Hanford down to the repository in Carlsbad and to the eventual high level repository.

Last year, the Congress provided money through the appropriation process for routing, inspection, emergency response, and public education. We now need the Congress to write those policies into law, to give us a direction on how to proceed year in and year out and not simply on a yearly basis.

Finally, Mr. Chairman, I would like to mention that we are aware of some efforts to gut the Hanford Tri-Party Agreement. The basic argument is that Hanford's problem is simply too big; it's just too big for us to handle. In point of fact, it is very big. It's a very large reservation and contains nearly 1 million cubic yards of nuclear waste.

This bill, complex as it is, contains legal and funding elements to allow us to get our hands on those 1 million cubic yards of nuclear waste to treat and dispose of so that they are no longer a threat to the Columbia River.

Mr. Chairman, we would urge you and your Committee to move forward and move this bill into law.

Thank you very much. I appreciate the opportunity to comment.

Senator BURDICK. Thank you.

Our next witness is Mr. Gerald Pollet, Executive Director and Legal Counsel, Heart of America Northwest.

STATEMENT OF GERALD M. POLLET, EXECUTIVE DIRECTOR AND LEGAL COUNSEL, HEART OF AMERICA NORTHWEST, SEATTLE, WA

Mr. POLLET. Thank you, Mr. Chairman. We greatly appreciate the opportunity today that you've given us to present testimony on S. 1462.

Our organization is not simply an environmental group, we are a regional quality of life organization and we believe that the issues surrounding the cleanup of America's nuclear facilities, run by the Department of Energy, offer a great opportunity as well as great risks for this Nation. There are great economic opportunities for this Nation to develop technologies. There are also great economic risks, explicitly in our region, to our agricultural base, our fisheries, and our tourism. We must get ahead of this problem.

We have several key points. First, the gap between the money requested for this problem and the money needed to meet compliance agreements and cleanup agreements is growing, it's incredibly staggering, and it's going to get worse unless we do something about it.

I have, in my statement, detailed figures about the size of that gap, which I'd like to offer for the record. The gap between the funds requested to meet cleanup, compliance agreements, and consent orders leads the Department of Energy to be in a position where it feels that it is above the law and the Secretary of Energy will determine what timelines and what milestones in a cleanup consent order are "legitimate" and which ones are not.

Now, what we are talking about are cleanup consent orders under RCRA and Superfund. As a citizen public interest attorney, we've always been concerned about the fact that these consent orders basically are the law in terms of what RCRA requires at a site. We cannot go to court to enforce RCRA-even if the Department of Energy is years out of compliance with a time line in RCRA—if a consent order says that they are going to be given time to get into compliance.

That means, however, that the Secretary of Energy's signature on these consent orders is a commitment to comply with those time lines—or so the public and Congress expect.

Mr. Chairman, 18 days ago we had an historic meeting with the Secretary of Energy. The Secretary, for the first time, met with citizen representatives of organizations whose members live in the shadows of the contaminated facilities of the Department of Energy. At that meeting, I asked the Secretary of Energy—not once, not twice, but three times—if he would commit to requesting the funds to meet the time lines and milestones of those consent orders, specifically the Hanford Cleanup Agreement.

It ought to be a simple answer. As detailed in my testimony, the consent order for Hanford commits the Department of Energy to request the necessary funds to meet the time lines. The public would think it's a simple answer. It is a legal document. It is the law. But the Secretary of Energy's response was that he would determine what were "legitimate requirements" and which were illegitimate requirements.

Now, he is a responsible party—using the CERCLA Superfund term for a polluter—he is a waste generator under RCRA. We do not allow private parties for our waste generators or polluters to determine which parts of the consent order are legitimate and which ones are not. However, the Secretary of Energy feels that he has the opportunity, because of the lack of funds, to determine his own priorities for meeting consent orders that his signature is on and for which he committed to a cleanup timetable for Hanford.

We need some accountability. The accountability we need is found in S. 1462 as introduced by Senator Adams. That accountability is a dedicated fund. When Congress appropriates money for cleanup and for meeting cleanup agreements, we should expect that that money is actually going to cleanup. The public expects it and we think it is outrageous that funds which Congress expects to go to cleanup are, instead, going for things that the public and Congress call operations.

For instance, at the Hanford plant, the Department of Energy's fiscal year 1991 budget proposal requests $25 million to $40 million for continued operation of the Plutonium Uranium Extraction plant at Hanford, and puts that money for operating that plant in the Environmental Restoration and Waste Management account. Let me tell you something. This is a plant that discharges 9,000 gallons of liquid every day to the soil every day that it operates. That is pollution, not cleanup.

We need accountability so that we have funds appropriated by Congress for cleanup, for meeting the title II compliance and management agreements, foreseen by S. 1462, and that that money will be dedicated to meeting the time lines and milestones of compliance and management agreements.

I see Senator Adams is here, and so, rather than discussing how we ought to fund these cleanup agreements, I should defer to him. He has done a wonderful job in putting together a comprehensive approach to finding a way of meeting this Nation's obligation to cleanup these DOE sites within 30 years. That's a commitment we applaud the Secretary of Energy for having made. But, unfortunately, that commitment of the Secretary does not seem to have been institutionalized in the budget process, and Senator Adams has done a wonderful job of proposing a system for both finding the funding, making the polluter pay, and also providing for the accountability to guarantee the public and Congress that when funds are appropriated by Congress, they will be dedicated to cleanup and meeting these agreements.

Thank you very much.

Senator **Burdick**. Thank you.

Our next witness will be Mr. Leon Lowery, Legislative Representative of Environmental Action, Washington, DC.

Mr. **Lowery**. Thank you, sir.

I'd be happy to defer to Senator Adams, if you wish to go ahead and make a statement at this time, and delay my testimony.

Senator **Adams**. Mr. Chairman, I'll wait until he's finished.

Senator **Burdick**. You may proceed.

STATEMENT OF LEON LOWERY, LEGISLATIVE REPRESENTATIVE, ENVIRONMENTAL ACTION, WASHINGTON, DC

Mr. **Lowery**. I wish to thank the Committee for holding this hearing and for requesting our comments on this bill. I wish to also thank Senator Adams and Mr. Dicks for introducing this legislation.

Those of us who have watched the Department of Energy facilities for years, lived close to those facilities, and worked on environmental issues surrounding them, have long had a concern over the growing problems that we knew were occurring, that we knew were being built up, that we knew—to great measure—were being ignored at those facilities.

In 1988, when the New York Times began a series of articles, some 100 articles over a period of months on just exactly these issues, public attention was finally drawn to what we knew was a growing and menacing environmental problem. We breathed a sigh of relief and waited.

In 1989 a new President was sworn in and a new Secretary of Energy was sworn in. That Secretary was given a mandate to bring a culture change to the Department of Energy and to finally put environmental concerns and problems on the same priority level as production concerns had always occupied in the past.

Again, we waited. We have seen, during the course of the 100th Congress, many recommendations come to Congress and many actions taken by the Secretary. Many of those actions we applaud. We feel that the Secretary has begun, in a way that has never been done before, to address the issues that concern us.

We do, however, have serious concerns. You've heard many of them expressed today. I'll address some that I think may not have been talked about.

The recommendations that have come to Congress have come from State agencies, State Governors offices, attorneys general, national environmental organizations, the environmental protection agencies—many sources. Most of those recommendations contain three essential elements. First, DOE facilities must be brought into compliance with Federal and State environmental laws both as to cleanup of existing problems and as to ongoing waste management and hazardous materials handling practices. Second, there must be external oversight of DOE practices. Third, there must be a stable funding base from which to attack those problems.

Now, as we approach the end of the 100th Congress, much has changed, but much has remained the same. We have now the opportunity to begin to address those three concerns. This bill, S. 1462, in a way that is unique to all of the legislation that has been brought before the Congress, does just that.

I think we've had some discussion this morning concerning the way in which the bill addresses the funding issues, but I'd like to talk about something that I think is important. Maybe at least as important as the stable funding base that the bill achieves is the system of compliance, the system of the scoping of the problem which is contained in the legislation.

Over the last few years we have seen a number of attempts, both by the Department of Energy, by other Federal agencies, the Government Accounting Office, the Office of Technology Assessment—others—congressional committees, to assess the size of the problem at Federal facilities.

None of these, however, is based on a systematic and comprehensive survey of the sites. All of these assessments are based on Department of Energy internal productions and internal calculations. They have been done in consultation with other agencies, but not in institutionalized consultation which would give other agencies the same jurisdiction over decisions as to environmental cleanup that the EPA, for example, or State agencies have when confronting a private industrial polluter.

Until such a process is reached, including both State and other Federal agencies, there can be no way to understand what the size of the problem is, what needs to be done to clean it up, and how much it's going to cost.

S. 1462 requires the Department to complete baseline surveys of all sites. These surveys would identify and catalog all Federal nuclear facilities, catalog existing hazardous nuclear materials, the level of compliance with all Federal environmental laws, past and current releases, existing off-site contamination, management activities to correct such contamination, and the status of activities for management and control of high level radioactive waste and transuranic waste.

Then, in conjunction with the Environmental Protection Agency and the States involved, the Secretary would prepare compliance plans to indicate exactly what actions would be required to bring the sites into compliance with all applicable Federal laws, a description of the compliance activities, including enforcement being taken by the Administrator of the EPA and the States, and a determination of the cost of those compliance activities, along with programs for quality assurance, and programs for monitoring and inspection.

Only at this point would we have a systematic assessment of the scope of the problem. Only at this point would we be able to have an idea of what actions are necessary to bring DOE facilities into compliance. Only at this point would we be able to project meaningful costs for cleanup.

It is a simple idea. You list all the sites. You list all the laws. You make a determination of where the sites are out of compliance with the laws. You make a determination of how much it will cost to bring those sites into compliance with those laws. As I say, it's a simple idea, but it's a huge task. Until that task is undertaken, we have not, as the Secretary would say, "gotten our arms around the problem."

Much has been said recently, in discussion of this legislation and other legislation, of a national prioritization system for cleanup at DOE and other Federal facilities. Until we have gone through a process—this very process that is outlined in this bill—we will have no basis for making such a prioritization system. In fact, it may be true that some Federal environmental laws are not amenable to that kind of prioritization system. I would submit that RCRA is one of those laws. RCRA is primarily a permitting and a licensing law. There are corrective actions taken under RCRA, but it's difficult to imagine how you prioritize permitting and licensing. It's sort of like saying, "We're going to go out and give licenses to the worst drivers first so we can handle the problems on our highways."

We do need to take the steps that are taken in this legislation in this compliance agreements program.

Mr. Duffy earlier indicated that he thought the time lines might be short. I might agree. There is contained in the bill, however, the revisiting of these compliance agreements and these compliance plans periodically over time. Such revisits would be required and adjustments would have to be made, but we have to start somewhere. This is the most important point. This is the only way we can begin.

I thank you.

STATEMENT OF HON. BROCK ADAMS, U.S. SENATOR FROM THE STATE OF WASHINGTON

Senator ADAMS. Thank you very much, Mr. Lowery.

This morning I apologize for my arriving a little late. I was representing Senator Burdick and myself at the memorial services for Senator Spark Matsunaga who, as you know, passed away two weeks ago. His services were this morning. Chairman Burdick and I are both on the Appropriations Committee and he is at an Agriculture Committee hearing.

I want to thank particularly all of you for being here this morning. This is one of the most important mornings for the next 50 years of our country that exist. It is on this kind of a morning that I want thank Dan Silver from the Governor's office for being here; Leo Duffy from DOE; Leon Lowery from the Environmental Action; and Gerald Pollet from Heart of America.

At this point, I would like to make my statement, and then we will go into a question and answer period with counsel.

Chairman Burdick, and the other members of this Committee have been more than courteous to me, members of my staff, and to other Senators that have been involved in this bill.

Senator Metzenbaum has just joined us.

I want to thank the members of the Committee for the hearing today on S. 1462, the Federal Nuclear Facilities Environmental Response Act.

As you know, this bill is aimed at one of the Nation's most serious environmental problems, environmental contamination resulting from the Federal Government's own nuclear facilities. While public concern over these problems is very high in my State of Washington, the problem is really one of extraordinary importance. It is one that has divided communities, at times, but has united the State in a concern. These waste facilities must be cleaned up. We have, in the past, history that goes back to World War II. We've had eight of these reactors along the river. We have more contaminated waste collected on that reservation than at any known point in the free world.

But the problem is really a national one. We are launching this to assist many States. There are 17 defense complexes in 12 States. When all the additional nuclear sites associated with the old Manhattan Project, the surplus facilities, the Department of Energy facilities, and the Nuclear Energy Research and Remedial Action Program sites are added, DOE is responsible for hundreds of contaminated sites. These sites are contaminated in a fashion that they must be extraordinarily, carefully handled. There are not typical waste sites.

This bill would establish a dedicated Federal fund to bring Federal nuclear facilities into compliance with the Federal environmental laws and create a grant program for affected States to oversee these compliance activities. I'm glad Mr. Lowery mentioned that the bill is not just a trust fund bill. It is referred to as a trust fund bill. Though it is referred to as a trust fund bill, it is a bill that sets up a system statutorily. So regardless of who is Secretary, the procedure moves ahead, but there is funding for it.

It would also establish a new office within the Department of Energy to manage all of the Department's environmental compliance and remedial action programs for Federal nuclear sites. The grant program and a joint U.S. Department of Energy/U.S. Environmental Protection Agency research and development program, also set up by the bill, would be funded out of the dedicated Federal fund. This is terribly important. The estimates of the costs of cleanup are astronomical and growing all the time. Our only hope is that the research and development abilities of this Nation are devoted to this task so that those costs can not only be greatly reduced, but the public health and safety protected at the same time. This is a major project which we hope will be carried out at areas such as Hanford. Goodness only knows that we have the waste to be worked on and the people there who have the abilities to deal with this very difficult substance and this very difficult problem.

Examination by DOE, the Congress, GAO, and individual State Governments—I particularly appreciate the Washington State Government being here because they've been wrestling with these problems for the last three years very intensely. All of these studies indicate that the cost of cleaning up the environmental contamination, upgrading environmental controls, safety waste disposal, and decommissioning of DOE nuclear facilities could exceed $100 billion. The Federal Government has also assumed or offered to assume responsibility for a wide range of nuclear wastes and facilities over the years. Many people in the public do not know this, but this is a growing problem, not a static one. There are uranium mill tailings sites, commercial low level waste disposal sites, surplus Federal sites, facilities that were contaminated with nuclear material, and commercial nuclear facility decontamination and decommissioning.

A lot of people wonder what happened to the Three Mile Island pieces and parts. They traveled across the country and many of them ended up at Hanford. People don't even know that. I have been in hearings where various Senators were astonished to find that these had moved by train through their cities and they had not known it.

Costs associated with these cleanup activities alone are expected, as I said before, to approach or exceed $100 billion and take decades to complete. This will not be done in three or five years.

The purpose of this bill and the Environmental Response Fund is to finance environmental corrective and remedial actions at DOE nuclear facilities and sites, decommissioning and decontamination of those facilities, long term surveillance, monitoring, and maintenance of facilities and sites where required. The fund would also cover some research and development costs for developing cleanup technologies—I want to emphasize that once again. Cleanup technologies—we need them badly—and grants to affected States and Indian tribes who are also impacted by this.

The central premise of the Environmental Response Fund proposal is that costs of remedial measures, decommissioning, and long term care should be paid for by the programs or beneficiaries of those activities or facilities that require corrective actions. To the extent practical, they should be charged. Although a large portion of the costs, as Mr. Duffy knows, that DOE faces are from past weapons production and can probably be recovered only from Federal appropriations. This is not the exclusive case and every effort should be made to allocate costs to the other appropriate sources where it can be done.

The use of a dedicated Federal fund provides a proven mechanism for funding large long term projects and for collecting revenues from diverse sources. One of the reasons that I placed this bill before the Senate and have been pressing it is that I am a former Secretary of Transportation. The only way that we were ever able to conduct and carry out a 35 year construction program of hundreds of billions of dollars—the interstate highway system—was to establish a trust fund, a rotating fund, because long term projects require long term contracts and a long term commitment. That's what we're dealing with here. You cannot go up and down when once you start to build or decommission a particular facility.

The use of a dedicated fund for accumulation of revenues from current revenue sources of commercial users of DOE nuclear services for future costs of decommissioning should also be included in this.

I will continue on in a moment, but I want—since I have my good friend, Senator Metzenbaum here—I know he has a statement he wishes to make. I will pause at this time and recognize the Senator from Ohio, Senator Metzenbaum.

STATEMENT OF HON. HOWARD M. METZENBAUM, U.S. SENATOR FROM THE STATE OF OHIO

Senator **Metzenbaum**. Thank you very much, Senator Adams. This is my first appearance at this Committee, and I'm very happy to make it my debut and to do so in connection with the issue of cleaning up Federal nuclear facilities.

I want to say to you, Senator Adams, I applaud you for your legislation to create a Nuclear Cleanup and Compliance Trust Fund. I am a cosponsor of the bill. It is good legislation. I hope we can pass it. I believe it will go a long way in helping us come to grips with the wreckage caused by past Government nuclear activities.

For too many years we have overemphasized the production and gave short shrift the safety and environmental concerns. That came about when we originally put all the power in the Atomic Energy Commission and said that they were not only to develop the facilities, but they were to provide for the protection of the people as well. There was a contradiction in terms because they couldn't do that.

As a consequence, the developing occurred, but the protection of the people did not occur. Now we are paying the price. Many DOE facilities and surrounding areas have been contaminated with radioactive and hazardous waste. Communities and workers throughout the Nation are in danger. Soil is ruined. Streams are polluted. It will cost billions of dollars to fix all of the problems and it's going to take time.

Senator Adams' bill gives us a real chance to correct our mistakes. The sooner we pass it, the better this Nation will be, and the better the world will be. The issue is a critical one for the Nation and of special concern to my own State. There are three DOE nuclear facilities in my State alone, Fernald, Mound, and Portsmouth. Each site has a myriad of environmental, health, and safety problems associated with it. Each site deserves immediate and comprehensive attention.

So far the Department of Energy's record for cleaning up these sites has been less than acceptable. Fernald's feed materials production center is a uranium refinery facility designed to produce uranium metal for defense production needs. In 1986, the Department of Energy found degradation of on-site and off-site ground water quality, the generation of unidentified but potentially hazardous wastes, and harmful radon releases among other problems. Operations at Fernald were suspended last year because of these concerns, but so far little has been done to correct them.

A GAO study which they just released last month showed that out of 186 safety and health problems DOE identified at Fernald, the agency reported completion of corrective action on only 46. Of the 68 environmental problems identified, none—none—have been corrected. The GAO report found similar results for the environmental, health, and safety problems at the Mound plant in Miamisburg and the Portsmouth facility in Piketown.

DOE has been slow-moving at all of the nuclear sites throughout the country. For example, according to the same GAO study, DOE has identified more than 1700 safety and health problems at nuclear sites in 21 States, but has resolved only 34 of them. DOE has identified nearly 1300 environmental problems, yet none have been corrected. As I said before, these are complex and costly endeavors.

I'd like to believe that Admiral Watkins' five year plan will get the ball rolling to cleanup these sites and manage future operations more carefully. I think Admiral Watkins is a dedicated and a decent public servant. I think he means well. But I'm frank to say that I think the GAO study raises questions about DOE's true commitment to resolving its problems in a timely manner.

We need to change and improve things at DOE. This legislation offered by Senator Adams sets forth the foundation for the long term handling of our Federal nuclear problems. I urge my colleagues to give it their thoughtful consideration. I pledge to you, Senator Adams, that I will do every thing possible to move it forward. He has called upon me. I'll be there to pitch in and help.

Senator ADAMS. Thank you very much, Senator Metzenbaum. We appreciate very much your statement.

Senator METZENBAUM. Thank you.

Please excuse me for leaving. There is a press conference in five minutes on another subject. I'm sure you understand.

Senator ADAMS. I understand more than you will ever know. [Laughter.]

At this point, I would like to also, by unanimous consent, put in the statement of Senator Harry Reid in support of the bill, and the statement of Senator John Chafee in support of the bill, and they will appear in the record in full.

[The statements referred to follow:]

Statement of Hon. Harry Reid, U.S. Senator From the State of Nevada

Mr. Chairman, as an original co-sponsor of this legislation, I would like to express my enthusiastic support for S. 1462, the Federal Nuclear Facilities Environmental Response Fund Act and commend you for considering it at this time. I congratulate Senator Adams for his foresight in introducing this legislation and hope that we will move this bill quickly through this Committee and the Senate.

In recent years we have heard of the ongoing saga of federal facilities barely giving lip service to environmental concerns at government-owned sites. Recently, under the direction of the Secretary of the Department of Energy, Admiral Watkins, we have seen earnest efforts to identify, understand, and address environmental concerns at a number of the facilities; these efforts represent step one. We need to see such aggressive pursuit at all levels in DOE.

Federal facility compliance with environmental laws is fundamental, it is not optional; federal facilities warrant no special treatment over private facilities. Earlier this month, this Committee held a hearing on S. 1140, the Federal Facility Compliance Act, and plans to go to markup on it next week. This legislation before us perfectly complements the aforementioned Bill. Both are designed to ensure that federal facilities comply with Federal and State environmental laws.

We need to ensure that facilities that require attention have access to the resources they need. The cost of cleanup of nuclear facilities cannot be an impediment to do what is right to protect the public health and welfare and to protect the environment. That is the crux of the problem and that is what this bill addresses: the "how" to get it done.

It is no longer a question of whether radioactive and other hazardous waste disposal programs have been managed properly at these facilities, rather how poorly have they been mismanaged and what remedial and corrective actions are needed. This Bill would create a new Office of Environmental Management and Remedial Action to focus attention and oversight on complying with environmental laws and to undertake the cleanup effort.

The cost for cleanup and waste management will not be an incidental expenditure. DOE has revised its estimate upward by 15% since we introduced this Bill last August to $20 Billion over the next five years. Since August, DOE has had the benefit of the Tiger Team and other integrated assessment at a number of their facilities. While we appreciate DOE has initiated its process, we must recognize that we are far from realizing the depth and breadth of the environmental problems at DOE sites and, in some cases, how to deal with the cleanup and restoration that would be required. We, in Nevada, are frustrated with the slow pace of progress to cleanup the Nevada Test Site; I am sure this frustration exists throughout the Nation in those communities hosting a DOE facility.

When DOE begins to scrutinize the problems in a comprehensive manner, it will beget even more scrutiny; cost estimates will spiral upward. At long last, it has come time to pay the piper for years of environmental neglect and complacency. Admiral Watkins will scarcely get the program underway during his tenure as we now expect it will take more than 30 years for completion; the sooner we get started, the better.

Mr. Chairman, this hearing will address some very important issues. Concern for the environment must permeate through the gates of federal facilities. The Federal government should set the example for others to follow, and we need to provide the resources to get it moving.

Statement of Hon. John H. Chafee, U.S. Senator From the State of Rhode Island

Mr. Chairman, my thanks to you for convening this hearing today to address one aspect of the troublesome issue of contamination at our country's Federal facilities. It is clear that this issue has sparked more than the usual amount of debate associated with environmental issues. Lawsuits have been filed by several States to compel these facilities to accelerate the cleanup process, and the amount of money in issue is staggering.

Just two weeks ago we were gappling with the question of the liability of these facilities for State and local fines and penalties for violations of the hazardous waste law. I remain hopeful that we can resolve that issue promptly in a fair and reasonable way, and I am pleased to note that the Administration has been working closely with this Committee toward that end.

Today we will examine a more specific issue. The bill before us is designed to accelerate the cleanup process at facilities run by the Department of Energy.

Mr. Chairman, I believe there is general agreement that DOE facilities must be cleaned up—and that they must properly manage and dispose of their hazardous wastes. The question, of course, is how best to accomplish that goal given the significant scope of the problem and cost of the solution.

And this is a very significant problem, Mr. Chairman. I understand that DOE has identified roughtly 3500 distinct areas located at its facilities around the country that could need cleanup attention. In some instances, particularly where radioactive wastes have become mixed with hazardous wastes, existing technology is inadequate to provide proper and cost-effective cleanup. The price tag for cleanup has been variously estimated to run into the tens of billions of dollars.

DOE is to be commended for beginning to come to grips with the problem. The Department's "Five Year Plan" for environmental restoration and waste management is a notable effort to map out a progressive approach. And the Department is involved in significant research and development efforts designed to improve treatment technology. But I am concerned both about the pace of the DOE effort and the ability of the government to fund such an expensive cleanup over a reasonable period of time.

This bill is only one of several that are pending on the Federal facilities issue, Mr. Chairman. So I hope the witnesses won't mind if the Committee asks them a few questions about the larger issues posed by the Federal facilities problem. In particular, I would be interested in the Departments thoughts on S. 1802—a bill that would provide protection to DOE from the requirements of all Federal and State environmental laws under certain circumstances—and I will submit a question speaking to that issue.

So, Mr. Chairman, I am looking forward to hearing from the witnesses this morning, and I hope that we can develop a record that will suggest ways to ensure prompt attention to the DOE cleanup issue, that will assist in funding for that process, and that will lead to improved cleanup technologies.

Thank you Mr. Chairman. I will have several questions for the witnesses at the appropriate time.

Senator ADAMS. I will be brief with the remainder of my comments, and then we wish to have a discussion on the bill. But I think that the most important thing that can happen this morning is that we understand that this dedicated trust fund is the only way that we can maintain a long term commitment to the cleanup of the sites.

The Federal Nuclear Facility Environmental Response Fund—which is a mouthful—is modeled in part on the high level waste repository fund created by the Nuclear Waste Policy Act, and in part on the Superfund created by CERCLA. As in the high level waste fund, the DOE defense programs—and in this case DOE nuclear energy, research, isotope production, and uranium enrichment programs—make payments to the fund commensurate with their share of DOE's environmental costs.

The Environmental Response Fund would be established as a separate fund in the Treasury and managed by the Secretary of the Treasury. Expenditures from the fund for remedial activities would be made by the new office of Environmental Management and Remedial Action within the Department of Energy. Expenditures for grants to States and Indian tribes and regulatory activities would be made from the fund by the Administrator of the U.S. EPA. Both agencies would make research and development expenditures based upon a jointly coordinated research and development program plan.

Overall costs and cost shares would be determined by DOE, as was done for the high level waste fund, based on detailed cost projections and site specific and facility specific use by each program. These site specific costs would be derived from the requirements established for each site in the compliance and decommissioning plans required by the proposed legislation.

One of the problems that we have to face in this country—which we have not as yet faced—is that we will be reaching the end of life cycles of private nuclear plants. Where are these going to go? The first of them, an experimental plant, has been decommissioned. Parts of it went to Hanford. Parts of it are still in the ground. But you go to very, very large plants and you're going to have to be thinking, what are you going to do with these? What is the technology for the decommissioning?

I also know that a number of people are not aware of the fact that, for example, the Navy decommissions its nuclear submarines. What happens to the reactors? For example, when the Navy disposes of a decommissioned submarine reactor at DOE, it goes to the Hanford Reservation. This will require long term monitoring and maintenance. That's the reason for a trust fund. It's not going to go away. There will be more of them year after year after year. Under this plan, the Navy would make a payment to the fund for that.

The fund would also receive payments, or user fees, from commercial users of DOE nuclear facilities or services such as uranium enrichment or nuclear isotope sales to cover their share of decommissioning and waste disposal costs directly related to those services.

Another source of funds for the trust fund is the payment of fines, fees, and legal settlements resulting from violations of the Federal environmental laws by DOE or its contractors. The bill wouldn't alter any of the underlying Federal statutes. It simply would place the penalties into this fund. This would make it clear that DOE has the authority to recover the fines, fees, and penalties from DOE contractors and that contract indemnity provisions would not prevent DOE from recovering the penalties from contractor award fees.

This proposal also contemplates direct appropriations of $2.5 billion for fiscal year 1991—to show the reality of this, $2.8 billion is going in and is available for fiscal year 1991—and $3.7 billion for fiscal year 1992 for the first two years while the fund is established and its budget, allocation, and collection procedures are put in place. This sum will be in lieu of the regular appropriations to the Department for environmental activities and not in addition to such appropriations.

Once the fund is established the bill authorizes such sums as are necessary thereafter. This interim two year funding level is comparable to that announced by Secretary Watkins for environmental activities.

I want to share the comments of Senator Metzenbaum. We think that Secretary Watkins does want to do this job. We're trying to give him the tools so that it will be done and in an orderly fashion.

Lastly, the receipts to the fund would be reinvested in Federal securities and additional revenues that accrue to the fund from interest would be placed in the fund.

DOE and U.S. EPA would be required to enter into a joint agreement to coordinate research and development of technologies necessary for cleanup and decommissioning of Federal facilities. The agreement would include use of agency personnel in research facilities.

We're using the personnel that are already there and are in existence, but they would be directed to establish a technology transfer program for transferring new developments to the private sector. Funding for research and development for activities covered by the agreement would be provided and paid for from the fund.

I am optimistic that we can do this. I think that Secretary Watkins is correct when he says that we have to use our technology to reduce by billions, if not tens of billions of dollars the total cost of doing this, but we must do it in a safe, organized manner and with a dedicated fund.

I want to close with this one example because, again, it goes to my State. Those that are familiar with this and those at DOE know what we're talking about. We have 149 single shell tanks at Hanford. These are now filled with what is known as nuclear gunk. It is the remnants of years of storage of various items. Originally it was the nuclear waste, but over the years DOE has tried to do things with it.

In the course of that they have placed various other chemicals with it. Some of these we don't know whether they're going to blow up, leak, expand, or what they're going to do. My point is that technology simply does not exist today to do deal with the problems of those tanks. People don't know whether to dig them up and risk the scattering of the materials, to dig under them, to try to turn them to glass, or to even monitor them.

What concerns many of us—I know Mr. Pollet probably testified to this or some of the others before him—is that now, every so often we get a little puff and we don't know whether it's hydrogen gas that's coming up or if it's something else. There were various types of cyanide put in. All of this happened in the period of 30 to 40 years as people would experiment and try to decide how they were going to reduce the total content within the tanks and try to make them safer. We've now arrived at a point where we have to do something with them because those tanks are now all beginning to leak.

I won't go through the rest. I will, by unanimous consent, put in my full statement, but I want to close by commending Secretary Watkins. I also, Mr. Duffy, want to reply to your testimony that says that many of the actions that you and Secretary Watkins have taken are within this bill. That is correct. I have been a Secretary just as Secretary Watkins has. I will never forget the Supreme Court case that I went into as a defendant. It was on air bags. We had been trying to put air bags into cars since 1972. I had two Justices of the Supreme Court—because they saw me come in as a defendant say, "Well, you know, Secretaries come and Secretaries go, and whichever Secretary is there can make his or her own decision."

What is important in a long term program such as we have here is to try to take where you are, build on it, codify it, improve it, and create a permanent program so that we don't have the risk in a few years of another Secretary, a different Appropriations Committee, or a different President decide, "But we can let this go for awhile." That has been our problem in the State of Washington.

We have let this go far too long. I was first on the site looking at those reactors and trying law suits on them since 1961 on the end reactor. I had to sit there when I heard a report go out that the end reactor was a reactor similar to Chernobyl. The cloud from Chernobyl, when it went over Seattle, changed the whole complexion of thought in our State about whether we should continue that reactor.

So it isn't that this legislation is going to solve all the problems of the Department of Energy. It doesn't deal with a number of regulatory and management things that this Committee will be dealing with. But it does recognize a major mission, and establishes a major mission of the Department of Energy, and that it be structured, funded, and organized to handle the waste problem. It is intended to create those changes and provide a solid foundation on which the public can depend, and can continue to depend. We will deal with the unfortunate legacy of our Federal nuclear complex.

I once again want to thank Chairman Burdick and the other members of the Committee for asking me to chair the Committee hearing today, and also for holding the hearing, and to all of you for testifying.

Senator ADAMS. Counsel, do you have questions of some of the individuals here?

First, Mr. Duffy, I'd like to ask this question of you. I think you appreciate that there are some Senators that share my skepticism as to whether cleanup and waste management will retain a high priority and high visibility at DOE over the next 30 years. Are we going to go back to a production system again?

Mr. DUFFY. I think as far as the Secretary and myself are concerned, cleanup and waste management are visible and we are codifying it in agreements with the States that will keep it visible for the next 30 years. I don't think changing the Secretary of Energy will take away from the agreements that we have initiated with the States and will be a record of cleanup requirements. We also have interagency agreements with the Environmental Protection Agency which establish schedules that will require legal enforcement. So I don't think that position is a relative position with respect to the future.

Senator ADAMS. Mr. Duffy, in your view, setting aside the administrative concerns that you raised, is a dedicated fund an unreasonable approach to ensure cleanup and compliance activities are accomplished over a 30 year period?

Mr. DUFFY. I think some type of dedicated funding is required. I think the issue here is that these are not major projects. This is, I would say—it's hard to put into expression—but this program is a very viable program. It changes from year to year on the basis of what we're finding.

The basic problem, and I think that's been addressed by the Senators and by the representative from the Washington Governor's Office, is that we don't know what the cost is. The reason we don't know the cost of cleanup is because we're in the remedial investigation phase. The Department has been behind the power curve in trying to find out how contaminated the sites are.

So most of our funding at the present time is to determine the extent of contamination. With regard to the high level waste tanks at Hanford, the Secretary, in initiating the research and development demonstration test and evaluation plan, put the high level tanks as the first program which has a detailed road map for investigation into the two alternatives associated with cleaning up the single wall and double wall tanks at the Hanford site. It is the only program that has a detailed 20 year identification regarding what has to be done to examine those tanks and to clean them up.

So when you look at it from the standpoint of a fund, it has to be a fund where we can improve our ability to get access when new items are addressed. The problem we have with the current funding philosophy is the methodology that is recommended is mechanistic. This is more difficult than what we're already doing in the new organization. I think when the Secretary developed the directorate for the Environmental Restoration and Waste Management, he cut out the aspects of going to defense programs, nuclear energy, and energy research for them to ask for appropriations. The Environmental Restoration and Waste Management group is responsible for developing the costs associated with the cleanup directly with the various sites and submitting to Congress, for appropriation, the funds necessary on a year to year basis.

A contingency fund is more of a need than a dedicated fund at the present time. In the future, once we've established what the cost would be, at that point a dedicated fund might be available and might be useful to the Department. But right now, the complications of going to the individual secretariats, identifying in their budget, getting appropriations, that being turned back to the Treasury, and the Treasury being responsibie, is all a very complicated effort.

Senator ADAMS. Mr. Duffy, what portions of the bill do you support generally?

Mr. DUFFY. We support the establishment of the directorate for the Environmental Restoration and Waste Management, the Assistant Secretary for that operation, and the identification of the submissions for the budget on an annual basis. The Department of the Treasury aspect, we believe offers a complication. The access to the fund by both the Environmental Protection Agency and the Department of Energy seems to be a conflict in utilization of funding. The Environmental Protection Agency has the authority to go into Congress for its own funding. So the Department of Energy has to present its funding requirements and demonstrate its capability for implementing them.

Senator ADAMS. Mr. Silver, do you want to comment at all on the Governor's experience with the most recent agreement with the DOE?

Mr. SILVER. Thank you, Senator Adams.

First, I'd like to comment, Senator Adams, how much the Governor genuinely appreciates your leadership on this issue. We have a lot of ideas out there in the State, but you have, in this bill, moved forward to put those ideas into the force of law. You have been a leader in these Hanford cleanup issues for some time and without your good auspices, Senator, we could not have negotiated the Hanford Tri-Party Agreement. So we are pleased to be here in support of your bill this morning because you have been supportive of us so many times.

Let me just say, Senator—going to the thrust of your question about what we're doing over here to the long term—we have a high regard for Secretary Watkins and a very high regard for Mr. Duffy. We admire their work. I would tell you, however, Senator—and you recall our days in the repository program where our relations with the Department of Energy were not so cordial. I can't remember the fellow's name who was the Secretary of Energy at that point, but I can tell you he would not even return the Governor's phone calls when we had concerns. That was not so long ago, Senator.

I don't know how long Secretary Watkins will be with us, but we need, as you have indicated in your bill, to institutionalize these arrangements that we are working out. We are not in a partnership with the Department of Energy. We are regulators. We need protection. Our Tri-Party Agreement which we fought so hard to get—we're on the first anniversary of it this week—we don't know if the Congress is going to be standing with us for 30 years when we are trying to regulate these folks. We surely do hope so. And we hope that you're able to get your trust fund into law because that's the only way we're going to be able to do it.

Senator ADAMS. Mr. Pollet or Mr. Lowery, either of you, do you have a comment you'd like to make at this time?

Mr. POLLET. Thank you, Senator.

Regarding the three party agreement specifically, I believe that it is very clear, had your legislation been enacted two years ago, prior to the negotiation of our Hanford cleanup and compliance order, that we'd probably have a much stronger agreement. First, the public would have felt assured that the funds would be available. That's first and foremost. As you're aware, the public is skeptical of whether there is a national commitment, especially when the Secretary of Energy has been quoted as saying, "I commit to the cleanup but not to the dollars", et cetera.

Second, your legislation in Title II very specifically levels the negotiating table between the States and the DOE. Right now it is totally tilted in DOE's favor. This was a real problem for the State's negotiators who, on a very regular basis, discussed this with ourselves and other interested parties.

Let me explain that. Number one, your bill requires site management agreements. Those agreements go beyond just what is required under RCRA today as defined by the Department of Energy's application of RCRA to the sites. It says that certain controversial areas that the DOE has refused, to date, to put into cleanup agreements such as decontamination and decommissioning of facilities will be negotiated with the States. So what you do is not only level the negotiating table between the States, but you define and provide guidance to the States, the EPA, and the Department of Energy as to what should be in these agreements.

The Department of Energy came up with the most specious legal argument that I had ever seen saying that the eight reactors that line the Columbia River are not "facilities" under CERCLA because they are "facilities not waste sites" even though we cited to them chapter and verse, as I do in my statement, that what the legal requirement is—the legal definition under Sec. 101, subsection 9 of CERCLA saying very specifically that a waste site is a "facility". They refuse to acknowledge that.

We think that this type of guidance in Title II as to what types of agreements should be negotiated, what ought to be in them, and what kind of time line we should have would really be important for the States.

Thank you.

Senator ADAMS. Mr. Lowery, do you have any further comment that you'd like to make?

Mr. LOWERY. I'd just add that experience with the agreements that were in existence prior to current agreements that are being negotiated in the State of Tennessee—the experience of the State with the Department, in light of what Mr. Silver said about the fact, and you yourself indicated, that the current Secretary may not be there forever. We have no way of knowing under what mandate future secretaries might view the agreements made with past secretaries of Energy, agreements made with the States, the variability in the agreements that are being negotiated currently, and their status under law as to whether they constitute consent orders which can be filed with courts as consent decrees all indicate that there needs to be an institutionalization of this process. We need to require that the Department of Energy confront the States, confront the Environmental Protection Agency, the Federal and State environmental laws, and comply with those laws just like we require everyone else to do. The problem is so complicated, difficult, and large that we have to have a special process for that compliance. But we have to treat our Federal facilities just like we treat our private facilities. The only way we can do that is by making it clear, as your bill does, that those facilities are required to comply with the law.

Senator ADAMS. Well, I want to thank all of you for your testimony this morning. The hearing record will remain open for one week for additional statements. This is the first step in a long road, and it is an important road for our children and our children's children and not just for us. I regret the fact that my generation has created such a mess to leave to our children and our children's children. I'm sure all of you do too. I just hope we do a good job in trying to put it together and see that we clean it up for them and leave the earth a better place.

The Committee will stand in recess subject to the call of the chair on this matter.

[Whereupon, at 11:20 a.m., the committee was adjourned, to reconvene at the call of the Chair.]

[Statements submitted for the record and the bill, S. 1462, follow:]

STATEMENT OF
LEO P. DUFFY
DIRECTOR, OFFICE OF ENVIRONMENTAL RESTORATION
AND WASTE MANAGEMENT
U.S. DEPARTMENT OF ENERGY
BEFORE THE
COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS
U. S. SENATE

MAY 17, 1990

Mr. Chairman, I appreciate this opportunity to appear before you to discuss the Department of Energy's (DOE) views on S. 1462, the "Federal Nuclear Facilities Environmental Response Act." The Department supports many of the concepts embodied in S. 1462 because they are consistent with environmental initiatives already undertaken by Admiral Watkins to address potentially serious environmental issues. My summary of the Secretary's actions in this area establish the framework for my comments on specific provisions of S. 1462.

As this Committee knows, DOE has introduced large quantities of radioactive and hazardous chemical pollutants into the soil and surface water, primarily as a result of its defense production activities. These problems resulted from 40 years of emphasis on production, far too often at the expense of the environment. To change this situation, the Secretary has initiated a new operating philosophy at DOE and is implementing a Ten-Point Plan to better manage the Department's responsibilities in the areas of environmental protection, public health, worker safety, and waste management. The Secretary's principal guideline is that there must be compatibility between our mission to produce defense materials and the protection of health and the environment. Admiral Watkins is firmly committed to achieving and maintaining strict compliance with laws, regulations, and agreements aimed at protecting human health and the environment.

In March 1989, Admiral Watkins directed the Department to prepare an Environmental Restoration and Waste Management Five-Year Plan as a means of gaining a better understanding of the specific cleanup and compliance criteria required in the near-term, as well as the costs of those actions. The Five-Year Plan, issued in August 1989, contains the Department's short- and long-term strategy for consolidating and coordinating DOE's cleanup and waste management activities. The Five-Year Plan treats these activities as a unified, national program and establishes a baseline against which progress can be measured. The first annual update of the Five-Year Plan, scheduled for publication in June, will add new sections on Technology Development to direct scientific and engineering resources to meet environmental cleanup and waste management needs and outlines transportation management requirements -- two areas specifically identified in S. 1462 but not included in the initial Five-Year Plan. With these additions, the scope and coverage of the updated Five-Year Plan closely match the provisions of S. 1462.

Admiral Watkins has created an atmosphere at DOE that encourages strong public participation in all aspects of environmental restoration and waste management activities, from planning and design through implementation. DOE invited representatives chosen by the Governors of Colorado, Idaho, Kentucky, Nevada, New Mexico, Ohio, Oregon, South Carolina, Tennessee, and Washington to review the Five-Year Plan while it was being developed. In addition, the Plan was reviewed by elected leaders of the Yakima Indian Nation from Washington State and the Shoshone Bannock Tribe from Idaho, representatives from the National Conference of State Legislatures, the National Governors' Association, and the National Association of Attorneys General. The Plan was reviewed for its technical content and approach by the National Academy of Sciences' Board on Radioactive Waste Management. DOE also sought Environmental Protection Agency (EPA) and Office of Management and Budget (OMB) views and has attempted to address the concerns expressed by all of these groups. DOE expanded its external review of the updated Five-Year Plan for fiscal years 1992 through 1996 by adding representatives of six States, one Indian Nation, as well as unions, industry associations, public interest groups, and environmental groups. Beginning with the updated Plan, DOE will also extend formal involvement to local communities by fostering public participation in the review of Site-Specific Plans prepared annually by each major DOE field office. This commitment to directly involve affected States, Indian Nations, Federal agencies, and local public interest groups is clearly in line with the goals of S. 1462.

To formalize the commitment of Congress and this Administration to fund cleanup work adequately, the FY 1991 DOE budget request proposes the establishment of a separate appropriation account to fund all DOE cleanup and restoration activities as well as related technology development efforts. This budget consolidates cleanup and restoration activities previously funded within the areas of Defense Programs, Nuclear Energy, and Energy Research contained in the Five-Year Plan. This focused, consolidated budget presentation should aid Congressional oversight and examination of the Five-Year Plan funding needs and help ensure that funds meant for cleanup and restoration will be allocated according to the priorities established among competing cleanup projects and not relegated to claim only what remains after DOE production and other program needs have been satisfied. This consolidated funding approach will provide assurance that the resources needed for DOE's environmental restoration and waste management are given more focused Congressional review and oversight.

Last November, Admiral Watkins established a new line organization, the Office of Environmental Restoration and Waste Management, within DOE Headquarters to implement his Five-Year Plan and appointed me to serve as its first Director. The Secretary has indicated also that he plans to establish an Assistant Secretary for Environmental Restoration and Waste Management to more appropriately recognize the responsibilities of this office. In his judgment, the demands presented by the planning and execution of a comprehensive, focused, and aggressive compliance program can only be met through the establishment of such an organization.

I will now turn to more specific comments on the major provisions of S. 1462.

TITLE I--ENVIRONMENTAL RESPONSE FUND

S. 1462, if enacted, would establish in the Treasury of the United States a separate fund known as the "Federal Nuclear Facilities Environmental Response Fund." This Fund would consist of direct appropriations; transfers from other Federal agencies; fines and penalties from DOE and its contractors; recovery of costs from DOE, other Federal agencies, and commercial and other non-

Federal entities that require nuclear related services. In addition, S. 1462 would transfer to the Fund amounts received for low-level waste disposal and uranium mill tailings activities. The purpose of this Fund is to provide an adequate, assured long-term source of funding for environmental restoration, decontamination, decommissioning, and long-term management of Federal nuclear facilities and sites.

We agree with the need to provide a commitment to fund the cleanup and restoration of DOE's nuclear facilities. We believe the Department has done this by proposing a new appropriation devoted solely to Five-Year Plan activities. Establishment of the Fund would not facilitate the acquisition of additional resources and, in fact, would require DOE to budget twice for cleanup costs -- once in its Five-Year Plan budget and again in the budgets of the programs which would be allocated a share of cleanup costs and tasked to contribute to the Fund.

We believe that S. 1462, if enacted, would complicate present budgeting requirements. DOE would be required to go through a complex process to project sources and needs for the Fund in addition to managing cleanup and restoration efforts. The budget plan would also require consultation and concurrence with the Secretary of the Treasury and the Administrator of EPA, along with consultation with affected States and Indian Nations. This added consultation and concurrence process with groups with potentially conflicting objectives and priorities would add more time, require development of a conflict resolution methodology, as well as impose a significant administrative burden to an already complicated and lengthy process.

Another troubling provision is the one which would require penalties stemming from violations identified in the bill and assessed against a DOE contractor to be paid by the contractor and not DOE. This provision could unfairly make DOE contractors liable for actions of previous contractors, DOE's inadequate management oversight, or the lack of sufficient funding to appropriately meet environmental requirements. Some clear distinction needs to be drawn on the responsibilities and liabilities of DOE contractors and should be reflected through amendments to existing contractual arrangements. Since DOE will be proposing a new rule to develop its contractor liability policies, it would be inappropriate to comment in detail on this issue.

To assure a commitment to fund environmental restoration and waste management needs, DOE requests the establishment of a highly visible, single appropriation account to fund Five-Year Plan initiatives. This approach will help focus DOE, OMB, and Congressional deliberations on DOE cleanup needs.

A compelling funding problem is the need to determine a way to meet mandated and unforeseen compliance requirements. There is a high level of uncertainty in predicting DOE's environmental compliance needs, which results from the nature and state of maturity of the program. DOE is in the early investigative phase of more than 75 percent of environmental restoration activities and will continue to devote a significant portion of its budget to characterization. Cost predictions for the remediation phase are therefore very tentative and subject to significant change. In waste operations and corrective activities, strict investigations of operational practices by DOE "tiger teams" and regulators may disclose the sudden need for unplanned funding. Given the low level of confidence in cost estimates at these early phases, and considering the need to meet compliance agreements in force between DOE and the States, it is imperative to develop a pragmatic and flexible budget strategy.

If DOE could get necessary funding immediately as needs arose, there would be no problem; unfortunately, that is not the way the Federal budget process works. Two years elapse between the initiation of a budget request and the Department's ability to obligate it. Even then, usual Federal practice is to fund projects annually, with multiyear efforts subject to annual review and renewal. The standard way to take care of new needs is through reprogramming from lower priority projects. However, adjustments to the budget request by reprogramming or amendment also involve a lengthy internal DOE process. The Department needs to address its problems in this area.

Many Five-Year Plan activities are not projects -- activities with clear specifications for completion; rather, they represent problems where DOE does not know at the start what completion will mean (technically or in terms of regulations) and often does not even know the full extent and nature of the environmental contamination. These activities are driven by external forces and events, which are not timed to coincide with established Federal budget cycles. Apart from reprogramming, the current multiyear planning process may be incapable of reacting swiftly enough to provide the resources needed to maintain compliance schedules. At any point, discoveries may cause a necessity to shift priorities among funding requirements. Estimating requirements for the Five-Year Plan must, therefore, establish adequate levels of funding, provide flexibility to accommodate unexpected results of ongoing activities and demands from regulators, and assure the public that DOE is being responsive to the public's concerns and is conducting its business in a cost-effective manner. The Response Fund envisioned in this bill will not provide the additional flexibility we require. On the contrary, administration of this fund increases the complexity of financial management of the cleanup program. The emphasis of the Fund seems to be on proper allocation of responsibility for cleanup costs rather than on improving our ability to respond to cleanup requirements.

If it turns out the reprogrammings are not an acceptable way to ensure that DOE is able to respond quickly as new assessments identify high-priority needs or as new regulatory requirements arise, DOE plans to work with Congress and OMB to better define workable alternatives.

TITLE II--ENVIRONMENTAL MANAGEMENT AND REMEDIAL ACTION

Inasmuch as a major thrust of S. 1462 deals with DOE's compliance with environmental requirements, I would like to reemphasize that Admiral Watkins has initiated many efforts to turn the DOE culture around and send the message that our defense production facilities can and must be run in an environmentally safe manner. DOE's Environmental Restoration and Waste Management Five-Year Plan is developed with broad participation by affected States, Indian Nations, Federal agencies, and interested public organizations. The Five-Year Plan identifies initiatives that must be undertaken at DOE installations and evaluates competing projects so that funds and other resources can be allocated to those areas that pose the most pressing problems and are in need of immediate action.

S. 1462, if enacted, would duplicate initiatives which DOE has already started and add requirements which, in our view, cannot be accomplished on the timetables identified in the bill. While a survey as required by Senator Mitchell's Bill, S.1140, will be possible, completion of a more extensive environmental baseline survey for each DOE nuclear facility in one year is not possible. Given the complexity of the problem and the study and analysis required to characterize and scope the problems, a more realistic timeframe is from 5 to 15 years. DOE's response has been to launch an aggressive 5-year planning process which requires annual updates to reflect the current situation and level of understanding so that the most pressing problems can be addressed now rather than waiting for the completion of comprehensive baseline surveys, perhaps years in the future. Other S. 1462 requirements may conflict with the concurrence processes developed pursuant to the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) or may require actions on a schedule not allowing for completion of such initiatives as preparation of a Programmatic Environmental Impact Statement before adequate Site Management Plans can be completed. DOE's efforts to reshape its management culture are underway and reflect Admiral Watkins' priority of bringing all DOE facilities into compliance with Federal and State environmental requirements as rapidly as possible.

TITLE III--RESEARCH AND DEVELOPMENT FOR ENVIRONMENTAL RESTORATION AND MANAGEMENT OF FEDERAL NUCLEAR FACILITIES

S. 1462 would provide for research and development (R&D) necessary for the environmental restoration, decommissioning, and long-term management of Federal nuclear facilities and sites. A major requirement is for an agreement with the Administrator of EPA for the purpose of coordinating R&D technology. DOE and EPA have already executed a Memorandum of Agreement to coordinate and jointly sponsor R&D in the waste management and environmental restoration areas. At present, there is about $2 million of funding allotted for efforts with EPA in these areas of mutual interest. This relationship, although important, does not represent the full extent of our cooperative activities with other Federal agencies. For example, DOE has recently signed a Memorandum of Understanding with the Air Force and Boeing Aerospace to explore solvent substitution applications for waste management. The total funding for this project is over $12 million. In addition, we are pursuing formal cooperative agreements with Corps of Engineers to develop new technologies for characterization, on-line/real-time monitoring, cost and project validation, and new methods for well drilling. The Department is pursuing an agreement with the U.S. Geological Survey to develop nonintrusive sensing of contaminant flows in aquifers and an agreement with the National Aeronautics and Space Administration to utilize remote sensing of contaminants.

The provisions of S. 1462 tailored to only EPA/DOE arrangements are too limiting, given the extensive R&D coordination and cooperation expected with other Federal agencies. A further example of more extensive Federal agency cooperation was a recent meeting of the Federal Remediation Technology Round

Table, comprised of representatives from DOE, EPA, and the Departments of Defense and the Interior. One purpose of this roundtable is to ensure exchange of information on technologies for hazardous waste site remediation.

Rapid technology transfer is also a high priority for DOE's Technology Development program. DOE intends to utilize, for instance, the EPA SITE program as one mechanism to bring demonstration rapidly to full implementation. However, we will explore other promising mechanisms to get proven technologies rapidly deployed.

DOE is also funding cooperative agreements, providing grants to nonprofit entities and universities and funding contracts to stimulate cleanup and environmental restoration R&D.

CONCLUSION

I commend the Committee for considering legislation to improve the planning, management, coordination, and funding of the large and complex environmental restoration problems facing DOE. We consider many of the actions already started by Admiral Watkins as being clearly consistent with the major provisions of S. 1462, but conclude that this legislation is not needed at this time. DOE officials would be happy to work with the Committee to clarify our views on this legislative proposal and would provide whatever assistance you may require.

- DOE -

TESTIMONY BEFORE THE
COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS

STATEMENT OF GOVERNOR BOOTH GARDNER
STATE OF WASHINGTON

presented by
Dan Silver
Special Assistant to Governor Gardner
May 17, 1990

Good morning, Mister Chairman, and members of the committee. I am Dan Silver, an aide to Governor Booth Gardner. On behalf of Governor Gardner, I am pleased to testify in support of S 1462, the Federal Nuclear Facilities Environmental Response Act. The Governor commends Senator Adams for his sponsorship of this legislation. The Governor strongly endorses the purposes of this legislation.

Governors' National Cleanup Plan

In April 1989, Governor Gardner and nine other governors issued a position paper on the cleanup of the nation's nuclear defense facilities. This was a bipartisan effort, from states coast to coast. The ten states were: Colorado, Idaho, Kentucky, Nevada, New Mexico, Ohio, Oregon, South Carolina, Tennessee, and Washington. A copy of the governors' paper is attached to this testimony.

According to the governors, a national program to cleanup defense nuclear sites should include these items:

1. A detailed schedule and national priority system, consistent with negotiated cleanup agreements;
2. Sufficient long-term, stable funding to ensure the cleanup and disposal of existing and future wastes;

3. An effective regulatory structure, including both state and independent oversight and enforcement capabilities;
4. The means to build and maintain public confidence;
5. The development of advanced technologies to ensure safe, thorough and cost effective waste cleanup and disposal;
6. A long-term waste disposal program;
7. Responsible participation by and funding of affected states;
8. Increased attention to health impact monitoring and analyses; and
9. A commitment to make use of existing work forces and to ensure their safety.

The bill before you today is entirely consistent with the positions taken by the governors in their paper.

The position paper was well-received by Energy Secretary Watkins. He has begun to address many of the elements of the governors' national plan. Shortly after receiving the governors' paper, the Secretary established a five-year cleanup planning process. He invited representatives of the ten states, several Indian tribes, and several other interested parties to participate in this process. The Secretary's inclusion of the states and tribes was unprecedented. It was a crystal clear illustration of the Secretary's message that the Department of Energy must change the way it does business. Not only was the Secretary's invitation to participate unusual, it was equally rare for the headquarters of the Department of Energy to listen to what the states had to say and to adjust its five year plan accordingly. The document which has emerged is entirely consistent with the Hanford Tri-Party Agreement as well as the governors' national cleanup proposal.

In this way, and in others, the Secretary has demonstrated his willingness to work cooperatively with Governor Gardner and the State of Washington on Hanford issues. We do not always agree with his decisions; in fact, he has upset us more than once. But his emphasis on safety and on environmental protection is a message that is well-received in the State of Washington.

As much as we appreciate the Secretary's actions to date, they are not enough. Senator Adams reminds us in his bill that we do not have a five year problem; we have a thirty year problem. The problem will be with us after Secretary Watkins has left. It will be with us after the current administration is gone. So, we applaud the Secretary for his initiatives. But we need to do more. We need to institutionalize these changes, through statute. And we need to build in additional protection.

Trust fund

The most important part of this legislation to us is the provision for a trust fund, "to provide an adequate, assured long-term source of funding for environmental restoration, decontamination, decommissioning, and long-term management of Federal nuclear facilities and sites." I will confess that we are not certain if the bill contains all necessary elements for establishing and operating such a fund; we are certain, however, that a stable, long-term fund is critical to cleanup.

The cost of cleaning up the Hanford Reservation in Washington is reputed to be between 35 and 57 billion dollars. Nationally, the cost of cleanup is estimated to be in excess of 150 billion dollars. Despite this high price tag, there is substantial national support for the cleanup of our military nuclear facilities. The Congress has provided generous increases in funds for the cleanup of Hanford. We appreciate your support.

However, we worry about the long term commitment to funding, once we get cleanup agreements in place across the country. Cleanup of the nation's nuclear facilities will take a full thirty years. We are uncertain if the country will have the strength of will over this extended period to bear the responsibilities for actions which have caused such enormous contamination in our state. In order to maintain the public's confidence in our ability to clean up this contamination, we must adhere to the compliance agreements that have been and are being negotiated.

A trust fund established in law would provide a mechanism tied to a thirty year cleanup schedule. While not a guarantee of funding, a trust fund structure would help to offset the pressure to cut back funding that will almost certainly intrude on our national cleanup campaign.

The other major value of a trust fund mechanism is that it depicts in clear terms the consequence of actions taken by the federal government in pursuit of our national security. That is, the cost of environmental compliance is an integral part of our national defense, and it should be explicitly recognized as such in our nation's laws. This "pay-as-you-go" ethic will force us to confront the consequences of our actions, rather than leaving those consequences to our children.

Research and Development

This bill has special provisions to promote investment in the research and development of new cleanup technologies. Governor Gardner supports this emphasis, for two reasons. First, without development of new technologies, we will be unable to cleanup the tank wastes at Hanford. These tank wastes are a great concern to us. They have leaked into the soil, and their contents are migrating to the Columbia River. And worse, they are potentially explosive, although the risk of explosion is small. It is imperative that we support adequate investments in R & D, in order to remedy this situation.

Second, the costs of cleanup are escalating at an alarming rate. We need to get control of these costs. Research and development offers one means of gaining control. For example, at Hanford we are exploring use of the Fast Flux Test Facility to transform high level wastes to low level wastes. The potential cost savings from this waste transmutation is enormous. The use of in situ vitrification, a technology developed at the Pacific Northwest Laboratory, is another example of how we can treat and dispose of wastes in a more cost effective fashion.

We place particular emphasis on the research and development portions of this bill, because cost control is imperative. We fear that escalating costs could undermine the publics' confidence in our thirty year cleanup campaign. It is essential for us to maintain the fiscal integrity of our cleanup agreements. In that context, we have begun to work with the Department of Energy and the Environmental Protection Agency on a process to ensure that cleanup budgets are independently derived, and that all monies spent are annually submitted to independent review. This committee might wish to assess our effort and consider how to include independent budget review into this legislation.

States and Tribes

Finally, we are pleased to see language in this bill to provide grants to affected states and Indian tribes, "to provide for cooperation and consultation between the Federal Government and States and Indian tribes affected by environmental compliance and restoration activities at Federal nuclear facilities." This language formalizes the arrangement that Secretary Watkins has established in his five year cleanup planning process. The State of Washington has already negotiated similar language in the Hanford Tri-Party Agreement, but this legal guarantee should be built into all compliance agreements.

In addition, the bill explicitly addresses the need to formally involve the states and affected tribes in planning for the transportation of nuclear and hazardous wastes. Last year, the Western Governors Association entered into a contract with the Department of Transportation to plan for the shipment of wastes through the western United States to the Waste Isolation Pilot Plant in Carlsbad. Congress appropriated $1.5 million to support this effort. We believe that Congress should use this bill to establish a policy in law to deal with WIPP transportation and other nuclear waste transportation issues.

Mr. Chairman, we appreciate the opportunity to address your committee. I would be pleased to answer questions about this legislation or cleanup issues at Hanford.

DEFENSE WASTE CLEANUP:

A PROPOSAL FOR A NATIONAL SOLUTION

Governor Booth Gardner
State of Washington

Governor Cecil D. Andrus
State of Idaho

Governor Garrey E. Carruthers
State of New Mexico

Governor Ned Ray McWherter
State of Tennessee

Governor Carroll A. Campbell Jr.
State of South Carolina

Governor Richard F. Celeste
State of Ohio

Governor Neil Goldschmidt
State of Oregon

Governor Roy Romer
State of Colorado

Governor Bob Miller
State of Nevada

Governor Wallace Wilkinson
State of Kentucky

APRIL 1989

I. Introduction

Over the past 45 years, the United States has developed, produced and tested nuclear weapons at sites in 12 states. During this period, massive quantities of radioactive and chemical wastes have been allowed to accumulate at these sites. Many past disposal practices were inadequate. Aging "temporary" storage facilities have failed. As a result, these wastes threaten the environment and the public health and safety.

As the Governors of states affected by nuclear weapons research and production facilities, we have joined forces to stave off that threat. We are pursuing the expeditious retrieval, safe cleanup and permanent disposal of these radioactive and chemical wastes. Our goal is to achieve this cleanup at all sites within 30 years.

The defense waste problem is a national problem and a national responsibility. It involves U.S. Department of Energy (USDOE) defense facilities in 12 states. It will take decades and billions of dollars to resolve. We strongly believe that the long-term answer to each site's problems ultimately lies in a national effort to clean up all USDOE defense facilities.

Accordingly, we are calling for prompt and decisive action by the Administration and the Congress to create an effective, long-term cleanup program. It must cover the cleanup and permanent disposal of radioactive and chemical wastes at all USDOE defense facilities.

II. The Need for a National Cleanup Program

Recent reports by USDOE and the General Accounting Office (GAO) document serious waste contamination problems at virtually every USDOE defense facility. Cases of extensive soil and groundwater contamination are common. In some cases, groundwater contamination is thousands of times above federal drinking water standards. At two installations, soil contamination levels hundreds to thousands times that of background levels have been reported. Further, the full extent of contamination at USDOE facilities remains unknown. New problems continue to come to light.

In July 1988, USDOE told Congress that defense waste cleanup could cost as much as $110 billion over the next 50 years. The GAO feels the cost may be as high as $130 billion. Despite these cost estimates, only about $975 million was appropriated in FY 1989. And, the major portion of these funds is for continued management of wastes in temporary storage -- and not for cleanup and permanent disposal.

USDOE has made progress in starting cleanup at a number of facilities. But, it remains uncertain whether this work will be completed before more serious and permanent harm is done. There is no firm federal commitment to the cleanup of all USDOE sites. Schedules have slipped repeatedly. Generally, USDOE has no milestones or deadlines for completing cleanup work. Funding is far less than needed. Application and enforcement of federal and state laws and regulations are questioned. The role of affected states and tribes is not clear. Public confidence in USDOE's ability to handle these wastes safely has been seriously eroded.

The longer cleanup is delayed, the more costly and dangerous it will be. Hundreds of millions of dollars will continue to be spent on temporary storage. Aging facilities will continue to fail. Waste forms now stable may not remain so. Wastes will continue to spread through the environment, contaminating more soil and water.

The time has come for the federal government to resolve the waste problem at all USDOE sites. It is time for a firm and substantive federal commitment. These wastes have been produced as part of the nation's defense programs. Their cleanup and disposal are a national obligation.

The magnitude of waste cleanup and disposal problems dictates the need for a national effort to clean up all USDOE sites. A credible cleanup program must ensure that radioactive and chemical wastes are kept away from people and the environment for as long as the wastes are dangerous. The program must include:

1. A detailed schedule and national priority system;
2. Sufficient long-term, stable funding to ensure the cleanup and disposal of existing and future wastes;
3. An effective regulatory structure, including both state and independent oversight and enforcement capabilities;
4. The means to build and maintain public confidence;
5. The development of advanced technologies to ensure safe, thorough and cost effective waste cleanup and disposal;
6. A long-term waste disposal program;
7. Responsible participation by and funding of affected states;
8. Increased attention to health impact monitoring and analyses; and
9. A commitment to make use of existing work forces and to ensure their safety.

III. Key Elements of a National Program

Congress must take action now to ensure the safe and expeditious cleanup of radioactive, hazardous, and mixed wastes at all USDOE facilities. The program must address these points:

A. Schedule and Priorities

The cleanup of radioactive and chemical wastes must be made as much a part of USDOE's agenda as the production of weapons materials. There must be a firm commitment to complete the cleanup and disposal within a reasonable and specified period of time. Schedules for most sites remain uncertain. Without a firm schedule, there is no assurance that the critical cleanup work will be completed in a timely manner -- if at all. Without a schedule, there is no means by which to rank priorities, measure performance, determine funding needs, or allocate resources.

The program must set firm milestones and deadlines to complete the cleanup. Federal environmental laws provide a precedent for setting a compliance deadline. We feel that a commitment to clean up all USDOE facilities within 30 years is both essential and achievable.

The program must also include a national priority system. The system must ensure all of the following:

1. The earliest possible cleanup and disposal of wastes posing immediate public health and environmental threats;

2. The cleanup and disposal of any other wastes before the public health and environment is put at risk; and

3. Full and complete compliance with federal and state regulatory requirements, including milestones and deadlines contained in adopted site cleanup agreements, action plans or consent orders.

The system must consider public health and safety, environmental factors, regulatory requirements, and the nature and volume of wastes. It must also take into account the complexities of cleanup and the costs of deferring action. Finally, needed cleanup work must not be disrupted or delayed simply because production activities at a site have been reduced or discontinued.

The program must provide for the schedule adjustments needed to deal with unforeseen problems. USDOE must work with federal and state regulatory agencies to prepare and implement detailed work plans. The plans must be consistent with national priorities and deadlines. USDOE should have the flexibility in working with EPA and the affected states to adjust schedules and reallocate resources, so long as such action will not extend cleanup work beyond the deadline. USDOE should keep Congress fully apprised of its progress and any major changes in work schedules and plans.

B. Funding

The program must be able to assure adequate and stable long-term funding for waste cleanup and disposal. An effective cleanup program will require a Congressional commitment to substantially increase funding levels for cleanup. The competition for funds between production and cleanup activities must end. Funding priorities for cleanup must be driven by the risks posed by waste problems and not the need to maintain production operations.

A fund to finance cleanup and disposal work should be considered. Direct appropriations to the fund should be sufficient to ensure the cleanup of existing wastes within established schedules and priorities. The proper handling, storage, and disposal of wastes generated in the future should be on a "pay-as-you-go" basis. Agencies responsible for the wastes should be required to make annual payments to the trust fund.

Payments to the fund must be sufficient to cover USDOE cleanup costs. The payments must also cover costs incurred by the U.S. Environmental Protection Agency (EPA), affected states and Indian tribes. The distribution of funds must be based on national cleanup priorities and on work schedules for completing cleanup activities by established deadlines.

C. Compliance with Federal and State Regulations

For over 40 years, waste handling, storage, and disposal have been largely exempt from any independent oversight. In a number of instances, poor waste management and disposal practices have knowingly been tolerated. These practices have contributed significantly to waste cleanup and contamination problems. USDOE has acknowledged these past problems. It has stated that it will comply with state and federal regulations in the future. But, the situation remains uncertain at best.

The federal government has actively challenged the application and enforcement of state Resource Conservation and Recovery Act (RCRA) programs at Colorado's Rocky Mountain Arsenal and USDOE facilities. States have been forced to constantly defend their regulatory authority and their interest in ensuring an effective cleanup of hazardous wastes at federal facilities. USDOE also continues to challenge EPA's authority to enforce federal regulations and standards. These challenges raise grave doubts that the federal government will effectively regulate itself.

The program must set up a clear regulatory framework for the cleanup. State and federal regulatory programs are key to an effective and credible cleanup process. These regulatory programs are intended to provide the independent authority needed to ensure that existing waste problems are fully evaluated and that corrective actions are both timely and appropriate. They are also intended to prevent new problems in the future.

The program must direct that all cleanup and disposal work strictly comply with applicable federal and state laws and regulations. EPA and affected states must be given the clear authority and direction to issue orders and ensure compliance with approved cleanup plans and schedules.

The role of state regulators must be strengthened. This is especially true where a state has authority to implement federal laws such as RCRA. The implementation of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) at USDOE facilities must not override or replace the implementation of RCRA for hazardous and mixed waste sites. RCRA and CERCLA laws need to be clarified in order to reassert Congressional intent that the states have the clear authority to implement and enforce RCRA-based hazardous waste laws at federal facilities. Likewise, the program must uphold a state's delegated authority to implement and enforce other federal environmental regulations.

Finally, since federal and state regulatory programs are critical parts of the cleanup process, the program must ensure that both EPA and the states have adequate funding for regulatory functions.

D. Public Confidence

The magnitude, history, and nature of the nuclear weapons waste problems make public confidence and acceptance crucial to cleanup success. The public must be fully aware of the problems. People must be convinced that cleanup solutions will ensure a safe and healthy environment.

To win public confidence, the decision-making and review processes must be open to the public. People must have the opportunity to understand the issues. They must have the chance to influence decisions relating to cleanup, transportation, and disposal of wastes.

In this effort, the affected states and Indian tribes should play a key role in public involvement and education programs. The cleanup program must provide for and fund state and tribal activities such as:

1. Technical review of cleanup plans and methods;
2. Transportation planning and emergency response;
3. Environmental monitoring of waste sites and cleanup activities; and
4. Public information and involvement programs.

E. Development of Cleanup Technology

The diversity of environmental conditions, coupled with the variety of waste forms, types, and volumes found at USDOE sites, present a formidable challenge to an effective cleanup program. We need to ensure the safest, most thorough, and cost efficient cleanup and disposal effort possible. We must not limit our options solely to technology currently available. The program must provide for the continuing research and development of advanced cleanup and disposal technology.

F. Long-term Waste Disposal Program

Cleanup efforts at USDOE's defense facilities cannot effectively be completed without the timely development and availability of a long-term waste management and disposal program. Since 1955, when the Atomic Energy Commission first addressed the problem of waste disposal, the history of nuclear waste management in the U.S. has been one of inattention during the 1950s and 1960s followed by repeated false starts, technical dead ends, and program failures. The Nuclear Waste Policy Act of 1982 was viewed as a major achievement in the evolution of federal waste management policy. Yet, seven years after its enactment, the federal waste management program is beset with problems, repeated schedule slippages, and declining confidence that the program would be ultimately successful.

Affected states are greatly concerned about the current lack of progress in the high-level nuclear waste disposal program and uncertainty about the scheduled availability and capacity of the proposed facilities. Although USDOE's current schedule for start-up of the high-level waste repository is 2003, there is little optimism that schedule can be met. Similarly, technical concerns and political problems associated with the Waste Isolation Pilot Plant (WIPP) continue to plague federal transuranic waste disposal plans critical to cleanup of USDOE's defense facilities. Thus, problems and delays in USDOE's efforts to develop both programs continue.

If progress is to be made in solving the nation's waste management problems, we must critically appraise the existing program and USDOE's program management and organizational structure, including recommended actions for correcting identified problems. A realistic and achievable schedule must be developed for long-term waste management and disposal that includes federal plans for disposal of all radioactive wastes (defense and commercial) requiring long-term geologic disposal. Once the revised schedule has been developed and approved, these activities and milestones must be given national priority and high-level commitment to their successful completion. In the near-term, particular emphasis should be placed on opening the Waste Isolation Pilot Plant (WIPP).

G. Responsible Participation By Affected States

Many of the issues associated with defense waste cleanup involve a variety of sensitive national security considerations. Nevertheless, involvement of the affected states at the critical policy level is necessary to achieving a responsible national cleanup program. Such involvement will enable USDOE officials to better understand state laws impacting a national program, and allow states to identify funding requirements necessary for the cleanup effort.

Toward these goals, the USDOE should establish an advisory group composed of a representative from each affected state. Each state member should be a personal representative of the Governor who can obtain the appropriate security clearance allowing for candid discussion regarding the full range of cleanup issues, including risk assessments and the establishment of priorities. The combined gubernatorial status and appropriate security clearance will enable the affected states advisory group to contribute toward resolution of the national problem and activate necessary follow-up actions at the state level.

An example of an advisory group is the State Liaison Officer designations currently maintained by the Nuclear Regulatory Commission.

H. Increased Attention to Health Impact Analyses

USDOE facilities throughout the country have experienced releases of radioactive and hazardous wastes for several decades. Recently, citizens near the USDOE plants have become increasingly concerned with historic as well as ongoing emissions and discharges and the potential health impacts associated with such releases. USDOE needs to address these health concerns by providing increased resources to federal agencies (CDC, NIH, NIOSH, or others) and to state environmental and health agencies to provide for epidemiologic studies, health risk

assessments, exposure assessments, birth defects and/or tumor registries, or other health initiatives that may be needed for specific sites. Such health initiatives should have a substantial role for states in the methodologic design phase and should provide extensive opportunities for qualified states to conduct pertinent elements of such initiatives at sites in their locales.

I. Utilization of Existing Labor Resources

Cleanup efforts should make maximum use of the knowledge and expertise of the current labor forces at USDOE facilities. Workers should be well trained, certified, and medically-monitored throughout the cleanup process.

IV. Conclusion

For decades, radioactive and hazardous chemical wastes have been allowed to accumulate at USDOE defense facilities across the nation. Today, as the result of inadequate past disposal practices and failing temporary storage facilities, these wastes pose a serious threat to the public health and safety and the environment.

While USDOE has begun to acknowledge and correct the problems posed by the wastes, the future is uncertain. The cleanup and disposal of wastes will cost billions of dollars and require decades to complete. Yet, no firm schedule exists and funding lags far behind requirements for an effective cleanup effort.

If we are to ensure a safe and healthy environment for the citizens of the nation, decisive action is essential. It is time for the federal government to fulfill its obligation to ensure the safe and permanent disposal of these wastes. We urge the Administration and the Congress to act quickly in establishing an effective and credible cleanup program for USDOE facilities.

Appendix A

U.S. Department of Energy
Research, Testing and Production Facilities

1. California
   - Lawrence Livermore National Laboratory, Livermore, CA
   - Sandia National Laboratories, Livermore, CA
2. Colorado
   - Rocky Flats Plant, Golden, CO
3. Florida
   - Pinellas Plant, Largo, FL
4. Idaho
   - Idaho National Engineering Laboratory, Idaho Falls, ID
5. Kentucky
   - Paducah Gaseous Diffusion Plant, Paducah, KY
6. Missouri
   - Kansas City Plant, Kansas City, MO
7. Nevada
   - Nevada Test Site, Las Vegas, NV
8. New Mexico
   - Los Alamos National Laboratory, Los Alamos, NM
   - Sandia National Laboratories, Albuquerque, NM
9. Ohio
   - Ashtabula (RMI), Astabula, OH
   - Feed Materials Production Center, Fernald, OH
   - Mound Facility, Miamisburg, OH
   - Portsmouth Gaseous Diffusion Plant, Piketon, OH
10. South Carolina
    - Savannah River Plant, Aiken, SC
11. Tennessee
    - Oak Ridge National Laboratory, Oak Ridge, TN
    - Oak Ridge Gaseous Diffusion Plant, Oak Ridge, TN
    - Y-12 Plant, Oak Ridge, TN
12. Texas
    - Pantex Plant, Amarillo, TX
13. Washington
    - Hanford Site, Richland, WA

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Washington, D.C. Office
Washington, D.C. Representative
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Mark Bloome, Chairman
Sharon Bloome, President
Honorable Don Bonker,
Member of Congress, 1974-1989
Bobbe Bridge
Del Keehn
Bob Lamson
Elizabeth Lamson

Executive Director
Gerald M. Pollet

HeartOfAmericaNorthwest
"Advancing our region's quality of life"

STATEMENT OF GERALD POLLET
EXECUTIVE DIRECTOR,
LEGAL COUNSEL
HEART OF AMERICA NORTHWEST

REGARDING S. 1462,
THE FEDERAL NUCLEAR FACILITIES ENVIRONMENTAL RESPONSE ACT

PREPARED IN COOPERATION WITH
LEGAL ADVOCATES FOR WASHINGTON

BEFORE THE
COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS
OF THE
UNITED STATES SENATE

MAY 17, 1990

MR. CHAIRMAN BURDICK AND MEMBERS OF THE COMMITTEE:

I.FOREWORD AND PERSPECTIVE OF HEART OF AMERICA NORTHWEST:

Thank you for this opportunity to testify regarding S. 1462. Our organization is rather unique as a 16,000 member organization devoted to "Advancing Our Region's Quality of Life". As such, we have been in the forefront of research, public education and consensus building regarding the clean-up of the nation's most contaminated land area - the U.S. Department of Energy's 570 square mile Hanford Nuclear Reservation, and other U.S. DOE facilities.

We approach this issue from a perspective borne of concern for our national and regional economy as well as our region's public safety and environment. Our Board of Directors includes established leaders from our region's business community as well as community leaders from the public sector and environmental community. Our concern is solely with clean-up and compliance at the facilities. We have no "anti-nuclear" ideology.

Following years of study and effort on behalf of legal compliance and clean-up at Hanford, we have come to understand the obstacles to Hanford clean-up as symptomatic of a national problem and requiring a national solution.

For that reason, our organization has held numerous workshops, university and business symposia, and other research and educational meetings to develop concepts necessary for a federal solution to the funding and clean-up crisis at U.S. Department of Energy (USDOE) nuclear facilities. We recognized from the outset that Hanford should not be in an endless competition for clean-up funds with other USDOE facilities.

Our organization worked with the "American Agenda" chaired by former Presidents Ford and Carter in preparing their "Report to the Forty-First President of the United States of America". That report had the following statement of the problem that this nation faces at USDOE facilities and of our organization's role :

> "DOE costs [for clean-up] are in the range of $110 to $170 billion, with the current annual budget at $478 million.
>
> "Congress has become increasingly concerned about progress at Federal facilities. Not only have certain Congressional committees expressed general concern about progress, but constituencies in some specific regions have been quite vociferous. For example, the Washington and Oregon delegations are extremely concerned about clean-up at the Hanford, Washington plutonium production site. *A citizens group, Heart of America Northwest, has galvanized political support for action at this site, which could cost up to $50 billion to clean-up.*

"American Agenda: Report to the Forty-First President of the United

States of America, chaired by Presidents Ford and Carter; - Environmental Future: Presidential Issues for the 1990s" at 13, Alvin Alm, Pres./ CEO Alliance Technologies Corp. (Emphasis added)

Our efforts have involved the creation of "The Hanford Clean-Up Task Force", sponsored by the Governors of Oregon and Washington and Members of our Congressional Delegation, in order to bring together over fifty Northwest leaders from: the hazardous waste industry, financial institutions, major Northwest businesses, tourism, fisheries, agriculture, Indian tribes, the Washington and Oregon Legislatures, and the Northwest environmental community.

The mission of The Hanford Clean-Up Task Force was to examine the scope of environmental and economic threats posed by Hanford wastes and to suggest solutions which our region could unite behind.

A. CONCLUSIONS OF THE HANFORD CLEAN-UP TASK FORCE:

1. Failure to fund the timely (thirty year) clean-up of all USDOE facilities posed an unacceptable risk to the health, environment and economies of the Northwest and each region where facilities are located;

2. An acceleration in funding for specific Hanford Clean-Up programs was neccessary - and experts agreed that funds for the specified projects would not be wasted.

3. This nation needs the technologies which will be obtained through an investment in the clean-up of USDOE facilities, and that there are global markets for these technologies and the expertise to be developed;

4. A thirty year timeline for the clean-up of Hanford - the most contaminated of all the USDOE facilities - is a practical goal, that timeline should be the maximum for site clean-ups;

5. Competition between states and USDOE regional offices for limited funds for clean-up was leading to an irrational allocation which did not meet the goal of having USDOE comply with federal and state environmental laws within a reasonable period of time; Further, that competition was undercutting the process of negotiating and fulfilling clean-up compliance agreements;

6. A dedicated fund for clean-up of USDOE sites needed to be established to provide certainty to the process of meeting the terms of negotiatied compliance agreements between USDOE, the states and USEPA; Further, a "Pay As You Go" system for newly generated wastes should be created to fund future disposal costs.

II. CONGRESS SHOULD ESTABLISH A NATIONAL GOAL OF HAVING USDOE NUCLEAR FACILITIES COMPLY WITH FEDERAL AND STATE ENVIRONMENTAL LAWS, AND SIMULTANEOUSLY PROVIDE THE PUBLIC WITH AN ASSURANCE THAT COMPLIANCE AGREEMENTS WILL BE FUNDED TO CLEAN-UP USDOE WASTE SITES WITHIN A REASONABLE PERIOD OF THREE DECADES:

A. GAPS BETWEEN REQUESTED FUNDING LEVELS AND THE LEVELS NEEDED TO MEET CLEAN-UP COMPLIANCE AGREEMENTS OR THIRTY YEAR CLEAN-UP GOALS ARE GREAT AND INCREASING:

"Gaps between current budget levels and total clean-up costs are great. *At current funding levels, it would take up to 355 years to clean-up DOE sites.*" "American Agenda; Environmental Future: Presidential Issues for the 1990s" Jan. 1989. Id at 13.

Funding to meet the remedial investigations, corrective actions and corrective activity investigations milestones agreed to by the U.S. Department of Energy in the Hanford Federal Facility Agreement and Compliance Order (e.g., not yet reaching the stage of actual clean-ups pursuant to RCRA or CERCLA) may fall a full $240 million short in federal fiscal year 1991. This shocking revelation was recently made by DOE Richland and Westinghouse Hanford Corp. personnel to the State of Washington, based on a comparison of milestone requirements with the President's Budget Request.

This potential shortfall in meeting the requirements of a compliance agreement negotiated and signed pursuant to federal and state law sends a shocking message to the American public: that USDOE is still above the law; that failure to request funds to meet the requirements of CERCLA and RCRA will be a defense for violating those federal laws; that the Secretary of Energy's commitment to abide by such voluntary agreements is illusionary.

The President's Budget Request for Fiscal Year 1991 leaves very serious shortfalls for meeting the USDOE's "Five Year Plan" at individual facilities.

The shortfall between the Budget Request and the total "requirements level" for all Environmental Restoration and Waste Management account activity at specific sites in Fiscal Year 1991 is $35.8 million for Hanford; $45.5 million for Oak Ridge; $67 million for the Savannah River Plant.

These figures are the shortfalls prior to spreading between the sites an unexplained $142 million cut in the overall request for the account. Further, significant amounts included in the President's Budget Request for The Environmental Restoration and Waste Management Account are for operations of the facilities; i.e., somewhere between $20 and $45 million in the budget Request for Hanford is actually for operation of the Plutonium Uranium Extraction Plant (PUREX) during 1991. And lastly, these shortfalls are as computed prior to the sites revising their Five Year Plans to accomodate FY '91 milestones of clean-up agreements which were not calculable in August of 1989 (when the Five Year Plan was released). See *Environmental Restoration and Waste Management, Five Year Plan*, DOE/S-0070, Aug. 1989.

In the Environmental Restoration account alone - what most citizens define as clean-up of USDOE sites - we face an astounding shortfall in the very first two years of $387 million in comparison to the USDOE's own Five Year Plan "Estimated Funding Requirements" for Environmental Restoration!

TABLE 1

SUMMARY COMPARISON OF USDOE
ENVIRONMENTAL RESTORATION FUNDING REQUIREMENTS
WITH FY'91 BUDGET REQUEST
($ IN THOUSANDS)

FY '91 REQUIREMENTS LEVEL (5 YR.PLAN)	FY '91 BUDGET REQUEST $	FY'91 TOTAL SITE SHORTFALL $	FY'91 TOTAL SITE SHORTFALL %
1,075,300	882,420	194,939	18%

See Five Year Plan P.97 Figure 3.2.1b for Requirements level.

The shortfall between the FY '90 Appropriations and the Environmental Restoration FY'90 Requirements Level as identified in the Five Year Plan of August 1989 was $193 million. Thus, in just the first two years of attempting to meet the requirements levels identified by field offices as necessary for meeting legal obligations under CERCLA, RCRA and other applicable and relevant standards, the USDOE may fall an astounding $387 million short.

We are not on a thirty year clean-up timeline, given these serious funding shortfalls.

B. WASTE CLEAN-UP COMPLIANCE AGREEMENTS AND CONSENT ORDERS ENTERED INTO BY THE DEPARTMENT OF ENERGY PURSUANT TO SUPERFUND AND RCRA CURRENTLY PROVIDE NO GUARANTEE THAT TIMELINES AND MILESTONES WILL BE MET:

The flaws in reliance upon the annual appropriations process for as long-term and complex a technologial undertaking as the clean-up of USDOE wastes have become apparent to states, citizen groups and tribes. See Appendix A for a listing of organizations endorsing S. 1462 for creation of a dedicated fund approach to funding compliance agreements. See Attachment 1 for Statement of the Yakima Indian Nation supporting "trust fund" approach of S. 1462. See Attachment 2 for quotation from Statement by Te Governors endorsing "trust fund" approach to funding compliance agreements.

The annual appropriations process makes it difficult to formulate long term research and remediation strategies for USDOE site clean-ups because of the lack of guarantee that funds will be sufficient in the following fiscal years to carry out monitoring, the devising of clean-up technologies and, the application of long term clean-up activities begun in earlier fiscal years.

As Congressman Bonker, a Member of our Board of Directors has stated on past occasions: "To overcome the unpredictability of the annual appropriations process, *Heart of America Northwest was hoping that the Hanford Three Party Agreement (Hanford Clean-Up Agreement) would guarantee a dependable flow of funds to implement the thirty year clean-up timeline agreed to by the Department in that Agreement. Unfortunately, the agreement includes no such legislative or judicial mechnaism that does this.*"

There is reason to doubt that the Secretary of Energy will commit to requesting sufficient funds to meet his Department's obligations under the Hanford Federal Facility Agreement and Consent Order. May 1989; EPA Docket Number: 1089-03-04-120; and, WA Dept. of Ecology Docket Number: 89-54 (Herein called Hanford Clean-Up Agreement).

That Agreement is expressly authorized by Section 120(e) of CERCLA, 42 USC 9620(e), as amended by the Superfund Amendments and Reauthorization Act of 1986, Pub. L. 99-499; and, the Resource Conservation and Recovery Act, 42 USC 6961, 6928(h), 6924(u)(v), as amended by Pub. L. 98-616, the Hazardous and Solid Waste Amendments of 1984.

"DOE agrees that it is bound by this agreement and that its terms may be enforced against DOE pursuant to the terms of this Agreement or as otherwise provided by law." Hanford Clean-Up Agreement Art. I Sec. 5.

"It is the expectation of the parties that all obligations of DOE arising under this Agreement will be fully funded. DOE shall take all necessary steps and make efforts to obtain timely funding to meet its obligations under this Agreement." Hanford Clean-Up Agreement Art. XLVIII Sec. 138.

Given the clear statement of the Secretary's obligation to seek the funds required to meet the time dependent milestones of the Agreement, should we expect an equivocal answer to the question as to whether the Secretary will commit to seeking those funds?

Eighteen days ago, I participated in a first-ever meeting between Secretary of Energy Watkins and representatives of citizen groups which watchdog the USDOE facilities in whose shadow their members live.

"I will ask for the funds we deem legitimate to accomplish Priorities 1 and 2 (of the Five Year Plan)," was the answer of the Secretary to the question of whether he would honor his legal obligation to seek the funds required to meet the clean-up milestones of the Agreement imposed pursuant to CERCLA and RCRA requirements. (emphasis added)

This response was given three times when pushed to explain what he believes is his obligation to comply with those statutes and the Agreement of the Department pursuant to them.

The Secretary called the identified funds required to meet the specific activities necessary to meet milestones in the Hanford Clean-Up Agreement next year a "*wish list from the field*".

These Compliance Agreements entered into between the USDOE and states and EPA constitute the legal requirements for the Department to bring its activities into compliance with RCRA and CERCLA.

In negotiating this Agreement, the hands of the State of Washington were unduly tied. The State agreed to terms that it would not agree to with any private party deemed a "potentially responsible party" under RCW 70.15 , the state Superfund law.

The State bent to the claimed budgetary restraints of the Department of Energy. It accepted as a limiting factor the level of funds identified through Fiscal Year 1990 for Hanford clean-up and compliance in the Hanford Waste Management Plan of Dec. 1987. DOE/RL 87-13. The State agreed to an unprecedented 6 year period for the DOE to end illegal liquid discharges to the soil. Again, DOE's budget constraints were cited. the State established no timeline in the Agreement for the expensive (and required by CERCLA and RCRA) Decontamination and Decommissioning of the nine nuclear reactors and associated contaminated facilities which line the banks of the Columbia River.

The DOE negotiated its best "deal" with the State of Washington and USEPA before signing the Hanford Clean-Up Agreement. Congress must now act to level the playing field in such negotiations by passing S. 1462 and by granting the States clear authority to assess civil penalties for RCRA violations per S. 1140.

We can no longer leave it to a "responsible party" under CERCLA or a waste generator under RCRA to determine what are the "legitimate" requirements of a consent order and which of these requirements are "illegitimate" for which funding can be ignored or delayed. The Secretary of Energy is the "responsible party" and waste generator under these statutes. The obligation to seek full funding of regulatory requirements and consent order requirements is clear. But it is not being met.

We believe that statutory creation of an Office of Environmental Management and Remedial Action, per Sec. 211, would institutionalize responsibility for meeting the terms of compliance agreements - as such this would be a powerful step towards changing the culture,attitudes and compliance record of the USDOE at both Headquarters and in the field.

C. THE SECRETARY OF ENERGY HAS AGREED THAT THE THIRTY YEAR GOAL FOR CLEAN-UP OF USDOE FACILITIES IS A RESPONSIBLE GOAL FOR THE NATION AND THAT A SINGLE APPROPRIATION ACCOUNT FOR CLEAN-UP SHOULD BE ESTABLISHED WITH AN ASSURANCE OF THE NECESSARY FUNDING FOR PROGRAM CONTINUITY AND LEGAL COMPLIANCE:

The first paragragh of the Foreword to the Department of Energy's Five Year Plan states: "DOE is committed to the goal of cleanup of all its sites within thirty years."

Our organization applauded this commitment by the Secretary when it was made. As I have mentioned earlier, our organization's research lead us to the conclusion in 1988 that a thirty year clean-up of the nation's most contaminated USDOE site was not only technically and budgetarily feasible, but was an evironmental imperative.

Since the Secretary's public statement of the thirty year clean-up goal, however, there has been very little indication that the Department has made accomplishment of the goal a budgetting priority. As we have discussed above, the pace of clean-up under the Department's proposed budget for FY '91 leaves the sites a shocking $387 million short of the clean-up plans covered by the Environmental Restoration category alone.

The process of Remedial Investigation, Feasibility Study and Remedial Action/ Corrective Action is one that requires identification of a reliable stream of funding available on an on-going basis if the nation wishes to avoid the wasteful start, wait and start again process of cleaning up hazardous/radioactive waste sites at DOE facilities. That same stream of funding must be identified if legal compliance agreements with identified milestones for completion of each step (investigation, feasibility study, remediation) are going to be honored in the future by the USDOE.

> "The current multi-year planning process may not identify resources needed to maintain compliance shcedules...At any point, discoveries may cause unanticipated spikes in funding requirements. these spikes can have the same result on operations that delayed or reduced annual funding would have....
> "Given the low level of confidence in the cost estimates in these early phases v. the compliance agreements in force between the DOE and the States, it is imperative that a workable strategy for budgeting be addressed. This budget *strategy should ensure necessary funding for program continuity and full compliance with legal*

requirements."
Five Year Plan, Sec. 1.3.2, Pages 24 and 25. (emphasis added)

III. PASSAGE OF S. 1462 WOULD ENSURE THE CREATION OF A DEDICATED FUND PROVIDING THE NECESSARY FUNDING FOR USDOE FACILITY CLEAN-UP PROGRAM CONTINUITY AND FULL COMPLIANCE WITH LEGAL REQUIREMENTS, INCLUDING MILESTONES FOR A THIRTY YEAR CLEAN-UP OF FACILITIES SUBJECT TO CLEAN-UP AGREEMENTS:

A. CREATION OF THE "FEDERAL NUCLEAR FACILITY ENVIRONMENTAL RESPONSE FUND" IS NECESSARY TO ASSURE STABLE FUNDING OF THIRTY YEAR CLEAN-UP TIMELINES FOR USDOE FACILITIES:

As we have noted in Section II. C. above, current patterns of funding are unlikely to achieve compliance with federal facility consent orders and other legal requirements at massively contaminated USDOE sites. This is because early investigations often yield immediate near term response requirements - unanticipated at the time of a budget request. Diverting funds from other clean-up activities will only lead to non-compliance. Further, it is extremely wasteful to have "start and stop" clean-ups of radioactive/hazardous waste sites.

Early cost estimates for remedial action or decontamination / decommissioning, as the USDOE notes in the Five Year Plan (see II.C. above and 5 Year Plan Pages 24 and 25), are notoriously unreliable. Yet, a steady - assured stream of funds is required to meet the same terms of compliance with clean-up orders and agreements as we expect of private parties responsible for a clean-up action pursuant to RCRA or CERCLA.

S. 1462 directs the Secretary of Energy, with the consultation and concurrence of the Secretary of the Treasury and the Administrator of the EPA, and following consultation with affected states and tribes, to prepare a budget plan for the investigation, study, treatment and disposal of USDOE wastes so as to achieve compliance with relevant environmental laws. See Sec. 102 (a). This budget plan is to be created based upon site specific plans - as such, it would bring the first necessary element of accountability to the current budgetting process for USDOE waste clean-up.

As we noted earlier, USDOE's current Fiscal Year 1991 Budget Request has a $142 million reduction for unidentified sites' Environmental Restoration activity due to unidentified "slippage". This type of sleight of hand would be corrected if we adopted the approach of S. 1462 and required site specific budget plans for obtaining legal compliance.

B. THE CURRENT ENVIRONMENTAL RESTORATION AND WASTE MANAGEMENT ACCOUNT LACKS SUFFICIENT ACCOUNTABILITY TO ASSURE CONGRESS AND THE PUBLIC THAT FUNDS APPROPRIATED FOR "CLEAN-UP" OR COMPLIANCE WILL BE SO UTILIZED:

The Environmental Restoration and Waste Management Account established by USDOE in the FY '91 Budget Proposal is a positive concept which has not yet been translated into a first step towards accountability in the expenditure of clean-up funds by the Department.

Review of the Department's Budget proposal reveals that many activities which have always been acknowledged to be "operations" and "production" related, are suddenly being reclassified as "clean-up". The transparency of this effort to claim an increased level of commitment to request "clean-up" funds is made clear by examining the shortfalls for Environmental Restoration activity at each site vis a vis the Five Year plan "requirements level" for FY '91 at the sites. See Table 1 above.

Further examples of the failure of DOE's approach to bring accountability to clean-up expenditures abound. At Hanford, the USDOE has suddenly proclaimed that the Plutonium Uranium Extraction Plant's (PUREX) operations, beginning in the second half of FY '91 are suddenly "clean-up activity" to be funded from the unified "Environmental Restoration and Waste Management Account". DOE Richland proudly trumpetted this increase in "clean-up" funding.

We should institutionalize the concept of the dedicated clean-up account and bring to the concept some statutorily institutionalized accountability. The criteria for expenditures from the account should be expressly identified on an annual basis as they would be pursuant to Section 102(b) of S. 1462.

Congress should insist that it be able to identify on a site by site basis, how much money USDOE spent in the past year on compliance with particular clean-up agreements and specific requirements under RCRA and CERCLA.

And, Congress should insist that USDOE specify how much it proposes to spend on a facility by facility basis to comply with agreements, CERCLA and RCRA in each Budget Request.

Amazingly, this accountability is impossible to find in USDOE's current budget proposal - particularly because USDOE is free to move funds or reprogram them from true "clean-up to waste management to "operations" within its current budget account.

At the heart of S. 1462 is the concept that the funds placed into the Federal Nuclear Facility Environmental Response Fund will be dedicated to clean-up as statutorily defined by Congress.

Our organization nicknamed this concept the "Trust Fund" bill.

S. 1462 does not truly create a "Trust Fund" which would not be subject to Congressional oversight and appropriation. Rather, it creates a Dedicated Fund - for Nuclear Waste Clean-Up funding that the citizens affected by USDOE air and water contamination can finally TRUST to be expended on clean-up as promised.

C. S. 1462 ADOPTS THE PRINCIPLE THAT THE "POLLUTER SHOULD PAY" FOR THE CLEAN-UP OF USDOE WASTES, THUS, IT FUNDS THE CLEAN-UP OF THE SITES WITHIN THE CONSTRAINTS OF GRAMM-RUDMAN BY ASSESSING THE ACCOUNTS/BUDGETS OF "RESPONSIBLE PARTIES"

S. 1462 is not a budget buster! Yet, it assures the states and public of the stream of funds necessary to clean-up a $150 billion problem within a responsible thirty year timeframe.

It does this by adopting the same principle Congress has applied in the federal Superfund program for private and municipal "responsible parties": The Polluter Should Pay.

In the case of the USDOE sites, the polluter is the specific programs of the USDOE budget accounts for which a site engaged in activity leading to creation of wastes or contamination. See Sec. 102(b)(2). These are, indeed, the "responsible parties" - the clients of the USDOE's facilities: atomic energy defense activity, naval nuclear reactor development and decommissioning, uranium enrichment beneficiaries, etc..

The costs of meeting compliance agreements on an annual basis, thus, would appropriately come from a reimbursement to the Department of Energy from each account or agency responsible for a proportionate share of the costs of cleaning up a site. The proportionate share of responsibility would be no different than allocating responsibility between private "responsible" parties for clean-up activity pursuant to CERCLA at a facility.

IV. BY DIRECTING THAT FINES ASSESSED AGAINST THE DEPARTMENT OR ITS CONTRACTORS BE DEPOSITED IN THE CLEAN-UP ACCOUNT, S. 1462 PREVENTS THE DIVERSION OF FINES AND PENALTIES AND ENHANCES CLEAN-UP EFFORTS:

In testimony before this Committee on May 2, 1990, Stephen Wakefield, General Counsel of the Dept. of Energy, testified that: "We must also ensure that fines and penalties do not impede our cleanup efforts by diverting funds from accounts that would otherwise be used to clean up facilities."

S. 1462 would statutorily assure that fines and penalties against the department or its contractors for violations of RCRA, CERCLA et al, would be dedicated to clean-up activities by placement in the Environmental Response Fund. Section 101(c).

Mr. Wakefield's testimony on S. 1140 also called for a prioritization system for determining which portions of legally binding and enforceable compliance agreements signed by the Department will recieve funding prioritization and which will - by dint of lack of funding - be practically exempted from enforcement.

Such provisions will only continue to tilt the negotiating table towards the Department of Energy in reaching Compliance Agreements with the States and EPA.

Whether or not Congress adopts such a prioritization system (and we hope that you do not as it would clearly undercut the enforceability of the obligations voluntarily entered into by the Department in the Hanford Clean-Up Agreement), further institutionalization by Congress is necessary for the process of promoting compliance and clean-up agreements between the states and USDOE. Section 203 "Site Management Plans" of S. 1462 has nmuch to commend itself to you in this regard.

Sec. 203 (b) would require site management plans to "provide for the timely decontamination and decommissioning of the facility and site". This would include D & D of individual "facilities" on the site - including now abandoned nuclear reactors.

In negotiating the Hanford Clean-Up Agreement, the USDOE initially refused to acknowledge that the 8 defunct reactors along the Columbia River were subject to the requirements of CERCLA and RCRA. Indeed, USDOE spokesmen today claim that these reactors are "facilities" - not waste sites and thus, not subject to the compliance agreement process. Yet, CERCLA's definitions makes it abundantly clear that a "facility" subject to CERCLA is " any building, structure...pipe or pipeline, well, pit....or(B) any site or area where a hazardous substance has been deposited, stored, disposed of, or placed, or otherwise come to be located..." 42 USC 9601 (9).

One would think that the law could hardly be clearer as to the inclusion of "facilities" within the jurisdiction of CERCLA. Yet, without Sec. 203 of S. 1462 the negotiation of clean-up agreements will proceed without Congressional guidance and without meeting the intent of existing environmental statutes.

The Federal Nuclear Facility Environmental Response Fund Act , S. 1462, does foresee the setting of priorities in the negotiation of clean-up agreements. This is purely logical and an extension, as we noted earlier, of existing practices in negotiating such agreements. The question is whether we will have a reasoned and public process for those negotiations and the setting of priorities within the scope of Congressional guidelines as to the minimum requirements for clean-up agreements, or whether we will have post-hoc prioritization after agreements have been signed.

APPENDIX A

ORGANIZATIONS ENDORSING S. 1462 AND NATIONAL NUCLEAR WASTE CLEAN-UP TRUST FUND

Fernald Residents for Environmental Safety & Health
    (FRESH), Fernald, Ohio
Citizen Alert, Nevada
Rural Alliance for Military Accountability
    Nevada
Concerned Citizens For Nuclear Safety
    (CCNS) Santa Fe, New Mexico
Southwest Research & Information Center
    Alburquerque, New Mexico
Yakima Indian Nation
    Yakima , Washington
Hanford Education and Action League
    (HEAL) Spokane, Washington
Heart of America Northwest
    Washington
Colorado Peace Network
    Denver, CO
Snake River Alliance
    Idaho
Environmental Defense Institute
    Moscow, Idaho
Radioactive Waste Campaign
    New York, New York
SANE/FREEZE: Campaign for Global Security
    Washington, D.C./chapters across U.S.
League of Conservation Voters
    Washington, D.C.
Environmental Policy Institute/
Friends of the Earth
    Washington, D.C.

Confederated Tribes and Bands
of the Yakima Indian Nation

Established by the
Treaty of June 9, 1855

YAKIMA INDIAN NATION
REPORT TO
WASHINGTON STATE NUCLEAR WASTE ADVISORY COUNCIL

MAY 10, 1990

National Issues:

1. Funding the costs of Hanford waste management and cleanup.

   Congress still considers nuclear waste cleanup a priority, but this interest won't last. The Yakima Indian Nation supports legislation which establishes a cleanup trust fund. Without a trust fund dedicated to cleanup, it will be difficult to maintain the pressure needed to guarantee full environmental restoration over the next three decades.

2. Developing a national priority system which allocates cleanup funds fairly to all sites, and complies with environmental laws.

   The priority system for environmental restoration won't be applied until a year from now, for the FY 1993 budget. The priority system, developed with input by states and tribes, is designed to allocate funds to sites according to the risks and benefits of a cleanup action (health, regulatory requirements, environmental, and economic). Unique risks to the Yakima Nation (derived from lifestyle factors and based upon Treaty rights) from Hanford wastes must be factored into the system, and will increase the priority of cleanup for the Hanford site.

3. Funding State and Tribal oversight of Hanford.

   The Yakima Nation has participated, since last June, in the development of the first national Five-Year Plan, and the first Hanford Site Specific Plan. Now the second national Plan is being drafted, and many significant decisions are being made at DOE Headquarters and at Hanford which will affect the success of cleanup. The Yakima Nation has been promised funding by DOE to cover its oversight costs, which directly supports the DOE recognition of Tribal sovereignty and Treaty rights. Oversight by the State of Washington and the Yakima Nation will be critical to ensuring the success of Hanford cleanup.

Post Office Box 151, Fort Road, Toppenish, WA 98948 (509) 865-5121

THE NATIONAL NUCLEAR WASTE CLEANUP TRUSTFUND

Federal Nuclear Facilities Environmental Response Act

BRIEF RATIONALE FOR HR 3065 (Rep. Dicks) & SB 1462 (Senator Adams): The radioactive and hazardous wastes and contaminated facilities at the U.S. Department of Energy sites pose a major threat to the health, environment and economy of our nation. Clean-up and environmental compliance costs may exceed $150 Billion. (GAO)

CURRENT FUNDING LEVELS ARE INADEQUATE AND FALLING FURTHER BEHIND

*Despite a significant FY 1990 increase in clean-up funds, *over 200 years would be required to complete the clean-up at current spending levels.*

*The President's FY 1991 Budget Request is $195 million short of the "requirements" level for FY 1991 "Environmental Restoration" (clean-up) activity identified in the Department of Energy's August 1989 "Five Year Plan". Costs for immediate clean-up and safety requirements have escalated beyond initial 5 Year Plan estimates.

"DOE is committed to the goal of cleanup of all of its sites within 30 years," Secretary of Energy Admiral James Watkins.

"This legislation establishes the revenue stream that will allow that cleanup activity to take place. It will allow Secretary Watkins' plan to move from paper to reality...It's a 'Pay As You Go' approach. We should have been doing this all along, providing funds for the handling of the waste generated. We are now facing an urgent situation." Congressman Norm Dicks (WA)

Governors of ten states have united in calling for a National Nuclear Waste Clean-Up Trust Fund to create public confidence in the D.O.E.'s priorities and clean-up commitment:

> "We are calling for decisive federal action to establish a comprehensive national program for the cleanup of all DOE defense and research facilities. We are also calling for the stable long-term funding required to support such a program....Our goal is to achieve this cleanup at all sites within 30 years.
>
> "A fund to finance cleanup and disposal work.... Direct appropriations to the fund should ensure the cleanup of existing wastes within (30 YEAR) schedules. (D)isposal of wastes generated in the future should be on a "pay as you go" basis. Agencies responsible for the waste should be required to make annual payments to the trust fund." -

Governors Andrus (ID), Campbell (SC), Carruthers (NM), Celeste(OH), Gardner (WA), Goldschmidt (OR), McWherter (TN), Miller (NV), Romer (CO), Wilkinson (KY); April 1989 Letter to Secretary Watkins.

SUMMARY: THE FEDERAL NUCLEAR FACILITIES ENVIRONMENTAL RESPONSE ACT

[HR 3065 AND SB 1462 - *National Nuclear Waste Clean-Up Trust Fund*]

1)Establishes a dedicated federal trust fund/appropriations account to finance cleanup, contaminated facility decommissioning, environmental compliance , and long term monitoring of federal nuclear facilities and sites.

> *Funds from the account would be available for the multi-year cleanup activities mandated by federal - state compliance agreements and a DOE national clean-up priorities plan, avoiding disruption of environmental compliance and environmental restoration activities;
>
> *States would be assured that funds appropriated from the account would not be reprogrammed by the D.O.E. for purposes other than established cleanup priorities;
>
> *The Department of Energy would be required to adopt a methodology for assessing the relative costs to be attributed to each program beneficiary of D.O.E. facilities requiring clean-up, each agency or program budget would be assessed costs, directed into the fund, for the purposes of meeting that year's cleanup obligations as a responsible party.
>
> *A "Pay As You Go" system is created for funding the storage, compliance, decommissioning and disposal of newly created wastes, funds from contractor fines would also go into the account.

2)Establishes a joint DOE/EPA Research and Development Program for developing new compliance and clean-up technologies.

3)Requires environmental surveys and plans from the DOE for correcting problems at federal nuclear facilities.

4)Creates a new Office of Environmental Management and Remedial Action to carry out environmental compliance and cleanup.

5)Creates a grant program so that affected states and tribes can oversee these compliance activities.

1990 DEFENSE AUTHORIZATION ACT

Amendments to the Defense Authorization Act will be sought to create a dedicated D.O.E. clean-up account in FY 1991. Funds appropriated to the account would be dedicated to clean-up and environmental compliance activities only per HR 3065 & SB 1462 Contact Congressman Dicks or Senator Adams for information.

Prepared by Heart of America Northwest; For Info. Contact: Honorable Don Bonker (202)778-1019 or Gerald Pollet(206)382-1014

TESTIMONY OF LEON LOWERY

ENVIRONMENTAL ACTION

BEFORE THE COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS

U. S. SENATE

ON

THE FEDERAL NUCLEAR FACILITIES ENVIRONMENTAL RESPONSE ACT

(S. 1462)

MAY 18, 1990

ENVIRONMENTAL ACTION

I am Leon Lowery, Legislative Representative for Environmental Action's Energy Project. I would like to thank the Committee for this opportunity to comment on the "Federal Nuclear Facilities Environmental Response Act" (S. 1462).

Environmental Action is a Washington based, national environmental and consumer advocacy organization. Founded in 1970, we have some 18,000 members nationally. We engage in public education, research, litigation, lobbying and advocacy on a wide range of environmental and consumer issues.

Prior to coming to Environmental Action in 1988, I was legislative representative for the Southern Environmental Network in Washington, on the staff of the Tennessee Valley Energy Coalition and President of Americans for a Clean Environment in Roane County, Tennessee.

1525 New Hampshire Ave., N.W. • Washington, D.C. 20036 • (202) 745-4870

I. INTRODUCTION: A CHANGE IN CULTURE

In the fall of 1988 the New York Times began a series of articles which revealed to Americans the extent of the environmental degradation at U.S. nuclear weapons production facilities. Americans were shocked.

To those of us who had long been concerned with these issues there was a sense of relief that attention was finally being paid to what we knew was a most serious environmental problem. As more information was made public through Congressional hearings, news reports and investigations, even the most pessimistic critics were surprised at the scope of the disaster.

An industry had been allowed to set its own environmental standards and then determine for itself whether it was living up to those standards. A veil of secrecy over the whole complex, coupled with great pressure to produce, resulted in an emphasis on production over environmental concerns.

Along with growing awareness of the extent of pollution and endangerment of public health came a realization of the staggering cost of paying for correction of the mistakes of the past. Estimates for cleaning up Department of Energy facilities had begun in the early 1980s in the billions of dollars counted in single digits. Now DOE and other agencies' estimates are in the billions counted by hundreds.

In 1989 a new president appointed a new Secretary of Energy who promised a "change in culture" at the Department of Energy, who promised a "change in culture" at the Department of Energy, such that environmental concerns would take precedence over pressures for production. The new Congress also saw many legislative and procedural recommendations meant to deal with the acknowledged problem.

Recommendations came from states governors, attorneys general and environmental agencies; federal agencies, such as the Office of Technology Assessment, the General Accounting Office and the Environmental Protection Agency; concerned residents of communities near facilities; national and local environmental groups; panels of experts assembled by Congress or the agencies and others.

Most of those recommendations incorporated three main themes: 1) DOE facilities must be brought into compliance with federal and state environmental laws both as to cleanup of existing problems and on going waste management and hazardous materials handling practices. 2) There must be external oversight of DOE practices. 3) There must be a stable funding base from which to attack the problems.

Now, as we approach the end of the 100th Congress, much has changed. but much has remained the same. We applaud steps the Secretary of Energy has taken to address management problems at DOE that resulted in the environmental catastrophe we are here to discuss.

However, we are skeptical of how deep the change in culture runs when we the Department continuing to evade environmental laws as is currently being done at the Waste Isolation Pilot Plant for disposal of transuranic waste. We wonder when we are given assurances that WIPP can open in September, when we know the transportation casks for the project have been declared to be in non-compliance by the Nuclear Regulatory Commission, when DOE is attempting to gain waivers from important environmental laws like the Resource Conservation and Recovery Act (RCRA). We are not confident of the future when we see DOE fail to request enough money from Congress to fund its own estimates of the needs for cleanup in the nuclear weapons complex.

If there is to be a change in culture at DOE it must be incorporated into law. No one administrator, no matter how wise or benevolent, can assure that the present and future DOE carries a continuing commitment to environmental protection. No-one is Secretary of Energy forever.

The Department must be required to subject itself to federal and state environmental laws. Those laws must be administered by the agencies that have jurisdiction over environmental protection. The American system must be allowed to work at Department of Energy facilities just like it does elsewhere.

The "Federal Nuclear Facilities Environmental Response Act" (S. 1462) goes far toward addressing the problems in the DOE system. It requires application of all federal environmental laws to the complex. It involves the Environmental Protection Agency and state agencies in oversight of that application. It provides a stable funding base for correcting the mistakes of the past and assuring compliance in the future.

We wish to thank Senator Brock Adams and Representative Norm Dicks for introducing this legislation. We would urge the Committee to give this bill rapid consideration.

II. SCOPING THE PROBLEM

Over the last few years we have seen a number of reports that attempt to estimate the cost of cleanup at DOE facilities or project needs for the complex. DOE's "Assessments of Needs" (Dec. 1988), "Modernization Report" (Dec. 1988) and "2010 Report" all have been attempts at looking toward the future in the weapons complex. The "Environmental Restoration and Waste Management Five-Year Plan" (August 1989) projects budget needs until the year 1995.

None of these, however, is based on a systematic and comprehensive survey of the sites. All are internal DOE productions, not done in conjunction with federal or state agencies with environmental jurisdiction.

Until a process such as is required in this bill is completed, no such projections or estimates are meaningful.

S. 1462 requires the Department to complete baseline surveys of all sites. These surveys would identify and catalogue all federal nuclear facilities as to existing hazardous nuclear materials, level of compliance with all federal environmental laws, past and current releases, existing off-site contamination, management activities to correct such contamination and the status of activities for management and control of high-level radioactive waste and transuranic waste.

Then, in conjuction with EPA and states and Indian tribes, DOE must prepare compliance plans. Each plan would indicate what actions are required to bring the site into compliance with all applicable federal environmental laws, a description of compliance activities, including enforcement, being taken by EPA and states, a determination of the cost of compliance activities, a program for quality assurance and monitoring and inspection programs.

Only at this point would we have a systematic assessment of the scope of the problem. Only at this point would we be able to have an idea of what actions are necessary to bring DOE facilities into compliance. Only at this point would we be able to project meaningful costs for cleanup.

It is a simple idea. You list all the sites. You list all the requirements of all the applicable laws. You make a determination of where the sites are out of compliance with those laws. You calculate the cost of bringing the sites into compliance. Then you add it all up. It is a simple idea, but a huge task.

Much has been said recently about a national prioritization system for DOE and other federal facilities. Until the process described in S. 1462 is completed, any attempt at prioritazition is like shooting in the dark. In fact, for some federal environmental laws such a prioritization process does may not work very well (RCRA is such a law).

S. 1462 contains the only rational approach to assessing what needs to be done in the DOE complex and how much it will cost.

III. FUNDING DOE CLEANUP AND COMPLIANCE

One of the fundamental contributors to the DOE miasma has been the budgetting structure. Cleanup and environmental protection needs have been forced to compete for funding with production requirements. In the past, with production of weapons materials clearly a higher priority for the Department, environmental protection received the short end of the budget stick.

Even now, with attention to DOE facilities at an all time high and environmental consciousness at a crest, the budget structure has led DOE to make requests for environmental program funds that are insufficient to meet the needs.

DOE's budget request for FY91 does not even meet the spending levels indicated in its own need assessments and long range planning documents.

Federal estimates for the total cost of cleanup and compliance range from DOE's July 1988 figures of $66 billion to $110 billion, to GAO's estimate from the same time period of from $100 to $130 billion.

The Five Year Plan, as discussed above, sets figures for projected expenditures at facilities through 1995. As shown in the accompanying chart the FY91 budget request falls short of the Department's projected expenditures from the Five Year Plan by some $626 million.

If the Department is not able to muster the political will

We are indebted to the Natural Resources Defense Council for permission to use this chart from testimony of Jim Werner and Dan Reicher, presented before the DOE Defense Nuclear Facilities Panel of the House Armed Services Committee on March 15, 1990.

TABLE 2
SUMMARY COMPARISON OF DOE
ENVIRONMENTAL FUNDING NEEDS WITH
FY1991 BUDGET REQUEST
($ Thousands)

	FY1991 FUNDING NEEDS(a)	FY1991 BUDGET REQUEST(b)	FY1991 NET SHORTFALL(c) (PERCENT)	FY1991 TOTAL SITE SHORTFALL(d) (PERCENT)
Environmental Restoration	1,075,300	882,420	192,880 18%	194,939 18%
Corrective Activities	214,659	168,598	46,061 21%	51,981 24%
Waste Management Management	2,031,608	1,652,312	379,296 19%	379,296 19%
TOTAL	3,321,567	2,703,330	618,237	626,216

NOTES:

a. DOE, "Environmental Restoration and Waste Management Five-Year Plan", DOE/S-0070, August 1989.

b. DOE, "Revised Laboratory Tables", March 1990, (3/08/90).

c. Some sites are budgeted for amounts greater than the FY91 needs, and other sites are budgeted for less than the identified needs. Therefore, the "net shortfall" underestimates the actual total shortfall.

d. Total site shortfall is the sum of the individual shortfall amounts from various sites where inadequate resources have been budgeted (see attachments D, E and F).

to request enough money to fund its own projections now, how are we to believe that it will be able to face the necessity to return to Congress for the next 30 years, having made the tough choices required to clean up this complex?

Further, there is no reason to assume that the Department's long range estimates will hold true. In fact, there is strong reason to think that DOE has significantly under-estimated the cost of cleanup and compliance.

As indicated above, it is difficult to know how accurate DOE's projections are, since there has been no comprehensive and systematic assessment of the scope of the problems in the complex.

States and EPA may not be willing to accept the levels of cleanup which DOE has assumed in its projections. We have already heard today of differences of opinion between the state of Washington and DOE in assessing the needs of the Hanford facility. External oversight, which all have agreed is necessary, will almost certainly serve to increase these internally generated figures.

Secretary Watkins tells us that the cleanup may not cost as much as projected, alluding to new technologies. Experience in the Superfund cleanups which have already taken place, however, teaches us that new technologies often cost more than current methods.

NRDC, in testimony referred to above has indicated several other areas where costs may escalate: 1) Lax record keeping for past waste handling leaves the probability high that new sites needing remediation will be found. 2) Current estimates are based on the use of remediation techniques that may no longer be acceptable. 3) Decommissioning and decontamination costs as estimated do not reflect the experience of such activities.

In short, this task may cost far more than even the current staggering estimates. If it is difficult now for DOE to request and Congress to appropriate sufficient money to meet current estimates, how much more so to fund greatly escalated costs.

It is impossible to project future demands on the federal budget. Demands for deficit reduction coupled with needs for spending in other areas , not to mention budgetary surprises like the $500 billion savings and loan bail-out, make confidence in future appropriations questionable.

It is essential that Congress insulate funding for the DOE cleanup from current and future budget pressures. The only proposal presented to date that provides this insulation is the trustfund provided for in S. 1462.

The method for allocation of the cost of the cleanup and compliance activities seems only equitable. Environmentalists have long advocated internalization of environmental costs. This is merely a systematic application of that principle to this unique situation.

IV. Funding State Participation

Equity demands that the federal government fund the state participation necessary to address these problems. The states did not create the environmental crisis at DOE facilities, the federal government did. In as much as it is essential for states to excersize an oversight role in cleanup and compliance it is just for the creator of the problems to fund that role.

United States General Accounting Office

GAO

Testimony

For Delivery on
May 17, 1990

Correcting Environmental Problems Facing the Nuclear Weapons Complex

Statement for the Record
of Victor S. Rezendes
Director, Energy Issues
Resources, Community, and Economic
Development Division

Before the
Committee on Environment and
Public Works
United States Senate

GAO Form 160 (12/87)

Mr. Chairman and Members of the Committee:

We are pleased to submit for the record this statement which provides an overview of the Department of Energy's (DOE) efforts to correct the environmental problems facing the nuclear weapons complex. To assist in your deliberations on ways to ensure that DOE's environmental corrective actions are adequately funded and effectively managed, my testimony will cover three major points.

First, the weapons complex faces a wide variety of serious and costly environmental problems. These include the need to upgrade facilities so that they comply with environmental standards, decontaminate and decommission unused facilities, dispose of radioactive wastes that have been stored for decades, and clean up contaminated groundwater and soil. The cost to address these environmental problems is staggering--ranging over $100 billion. Further, because the full scope of the problems is not known, future costs may be greater as more is learned about the nature and extent of contamination. In the final analysis, some areas of the weapons complex may be irreversibly contaminated and thus may require long-term institutional control.

Second, during the past year, DOE has made some important changes to its organization that should help change its management focus from one that emphasized materials production to one that more clearly focuses on environmental concerns. We have long pointed out that such a change in focus is needed. DOE must now keep this focus for decades as it works to address the wide-ranging environmental problems of the weapons complex.

And finally, it is generally recognized that the resolution of DOE's environmental problems will require the nation to dedicate substantial resources during a budget deficit era. Therefore, it is imperative that DOE has internal controls in place to ensure that resources are spent effectively in carrying out its environmental and waste management programs. This has not always been the case in the past. More specifically, to successfully carry out these programs, DOE must have an effective management system and internal controls to ensure that

-- priorities for funding are identified to address the more serious environmental problems and these problems receive sufficient funding;

-- funds allocated to cleanup and waste management are effectively managed and spent; and

-- continued emphasis is placed on developing and maintaining a cultural commitment to resolving the environmental problems confronting the weapons complex.

Over the past years, we have issued a series of reports addressing these issues (see attachment I). The remainder of my testimony will address these points in more detail.

DOE'S ENVIRONMENTAL PROBLEMS

In making nuclear weapons, enormous amounts of hazardous and radioactive wastes are generated. Historically, this waste either was disposed of by methods that allowed the waste to enter the environment or was stored until more permanent disposal alternatives were developed. As a result, DOE now faces formidable environmental problems. In this regard, our work over the past several years has described a variety of serious unresolved problems, which include the following:

-- More than 3,500 inactive waste sites throughout the complex need to be cleaned up.

-- Groundwater at DOE sites is contaminated with hazardous and/or radioactive material, some at levels hundreds to thousands of times above the drinking water standards.

-- There are difficulties in maintaining compliance with various environmental laws.

-- Delays have occurred in DOE's multibillion dollar effort to put transuranic waste[1] in the Waste Isolation Pilot Plant in New Mexico.

-- Some transuranic waste at DOE sites that will not go to the Waste Isolation Pilot Plant.

-- There are difficulties in finding a geological repository site for the disposal of high-level waste.

-- Some single-shell tanks at Hanford, Washington, have leaked or are suspected of leaking high-level radioactive waste into the environment.

Our analysis of DOE data shows that it may cost over $100 billion[2] to address environmental problems of the weapons complex. This includes $35 billion to $65 billion to restore the environment at inactive sites, $30 billion to dispose of radioactive wastes, $15 billion to decontaminate and decommission unused facilities, and $3 billion to $9 billion to bring facilities into compliance with environmental laws.

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[1] Transuranic waste is material contaminated with man-made elements heavier than uranium. This material is generally radioactively long-lived and toxic.

[2] These estimates are not of budget quality and should be used only to illustrate the magnitude of the problem. The information was derived from DOE data in 1990 constant dollars.

Because the full magnitude of the environmental problems is not known at many DOE sites, the costs to address these problems are likely to increase. In this regard, DOE is in the early phases of characterizing its environmental problems. Our experience in evaluating the Superfund Program administered by the Environmental Protection Agency (EPA) indicates that the less that is known about the extent of contamination, the more likely it is that the cost estimates will increase as the problem is addressed. Finally, DOE, is beginning to modernize its nuclear weapons complex. It is critical that environmental issues be addressed early in DOE's modernization process to avoid delays and unnecessary cost, and that the full cost implications of modernization decisions be recognized.

DOE'S EFFORTS TO ORGANIZE ITSELF FOR ADDRESSING ENVIRONMENTAL PROBLEMS

As we have pointed out in our reports and testimonies, the seriousness of DOE's environmental problems was compounded by a management attitude in DOE that emphasized the production of nuclear materials over environmental, safety, and health concerns. During the past year, DOE has acted to change its management focus toward environmental problems. These changes include programmatic restructuring within DOE, the issuance of a 5-year plan for environmental restoration and waste management, and efforts to make contractors more accountable for these problems.

To focus its management on environmental problems, DOE has established an Office of Environmental Restoration and Waste Management to consolidate environmental cleanup, compliance, and waste management activities. It has also restructured its budgeting system to reflect the creation of this office by establishing separate budget accounts for these activities. This reorganization, in our view, provides a framework for establishing the clear line of responsibility needed to carry out the cleanup effort. Its success, however, will depend on many factors, including DOE's continuing commitment over the next several decades to correct environmental problems.

DOE also issued in August 1989 an Environmental Restoration and Waste Management Five-Year Plan, which outlines a multibillion dollar effort over the next 5 years (fiscal years 1991 through 1995) to (1) begin bringing its facilities into compliance with environmental laws, (2) begin cleaning up environmental contamination, and (3) effectively manage the wide variety of radioactive and hazardous wastes that DOE generates. We believe the plan is an important first step in beginning to outline an approach for cleaning up DOE facilities and bringing DOE operations into compliance with environmental laws. DOE plans to update this plan in June 1990.

DOE has also undertaken efforts to make its contractors more accountable for environmental and safety matters. In October 1989 we issued reports and testified that the DOE award fee process needs to be restructured so that it accurately reflects the contractor's performance regarding environmental and safety matters. DOE is restructuring the process by, among other things, having headquarters review and concur in all awards and requiring that environmental, safety, and health matters be weighted at least 51 percent in the evaluation process for awards. These changes, if properly implemented, should increase the contractor's sensitivity to and performance regarding environmental compliance and safety matters.

These actions are important steps in creating an organization and management system with the capability to effectively plan, implement, and oversee environmental corrective actions. We believe it is wise that DOE is taking the time now to better organize itself to manage the environmental restoration and waste management effort. This managerial restructuring will likely continue this year as DOE changes its culture and strives to acquire the necessary expertise to effectively deal with the problems. DOE will also have to maintain these initiatives over the longterm because DOE believes it will take 30 years to clean up environmental contamination at its facilities.

CONCERNS ABOUT DOE EFFORTS TO ADDRESS ENVIRONMENTAL PROBLEMS

While recognizing the changes DOE has recently made to improve its management, I would like to discuss some overall concerns that we have about DOE's future management of its environmental restoration and waste management effort. As DOE begins to implement an enormously costly program, we believe that, in view of its past problems, it needs to be especially attentive to ensuring over the longterm that

-- priorities for funding are identified to address the more serious environmental problems and that these projects receive sufficient funding;

-- funds allocated to addressing the problems are effectively managed and spent; and

-- continued emphasis is placed on developing and maintaining a cultural commitment to resolve the environmental problems confronting the complex.

Today, DOE does not have a formal system for setting funding priorities that is generally accepted by those affected by this cleanup, such as states where DOE facilities are located. DOE recognizes the importance of a system to set funding priorities for its environmental problems that includes the views of affected parties. In its 5-year plan, DOE states its intention to develop a priority system that incorporates the views of state and tribal groups, EPA, and the public, with independent technical review by the National Academy of Sciences. According to DOE officials, DOE's objective is to have a new priority system operational, at least on a trial basis, for the fiscal year 1992 budget.

We also believe that in order to develop and maintain a national consensus and commitment, as well as to avoid past problems, DOE must have the necessary internal controls in place to effectively manage and spend funds allocated to correcting environmental problems. In this regard, the level of environmental funding should be commensurate with DOE's ability to ensure that funds are used efficiently for their intended purposes. Adequate DOE oversight is especially important, given the fact that DOE relies heavily on contractors to carry out a large part of its activities.

Shortcomings in DOE's oversight programs have been a continuing management problem. We have issued numerous reports identifying persistent problems with internal and external oversight of DOE's facilities. Similarly, the Secretary of Energy, upon taking office in 1989, determined that DOE's existing oversight system for environmental, safety, and health matters was a failure. More recently, on December 28, 1989, the Secretary of

Energy reported to the President and the Congress that DOE has several material internal control weaknesses that could affect DOE's environmental efforts. These weaknesses include contract management that needs improvements in DOE's oversight of contracts to ensure the work performed is acceptable and in compliance with laws and regulations. The Secretary also reported to the President that DOE's programs are being severely affected by staffing inadequacies in critical areas such as environmental programs and contract management.

Finally, we believe DOE needs to continue to develop and, once established, maintain a culture committed to resolving the environmental problems that confront the weapons complex. For decades, DOE and its predecessor agencies worked under a culture that stressed production. The Secretary of Energy, as part of his new management focus, is attempting to change this culture and increase DOE's sensitivity to environmental matters. However, such changes must filter down through all levels of DOE, including its contractors. Once DOE achieves this cultural commitment to environmental matters, DOE management will have to maintain it throughout the 3 decades that the current Secretary has set as a goal for cleaning up the complex.

SUMMARY

In summary, the environmental problems facing DOE's nuclear weapons complex are enormous and will take decades to resolve. Widespread environmental contamination exists at many DOE sites and the full extent of the environmental problems is not known.

During the past year, DOE has taken a number of steps to better deal with these problems, including an organizational restructuring to better focus on environmental problems. Such actions are important as DOE develops an organization and management system with the capability to effectively plan, implement, and oversee corrective actions. We believe it is wise that DOE takes the time now to properly organize itself to manage the long-term program needed to address the many environmental problems it faces.

To successfully carry out its environmental restoration and waste management programs, DOE must have an effective management system to ensure that the most serious environmental problems are identified and adequately funded and that funds allocated to correcting environmental problems are effectively spent. Furthermore, the seriousness and long-term nature of the task ahead makes continued oversight by DOE necessary to ensure that a long-term commitment to acceptable environmental practices is maintained within the nuclear weapons complex. We will continue our assessments of DOE's activities and plan to focus our attention during the coming year on evaluating DOE's management systems, including its oversight of contractor operations.

GAO REPORTS RELATED TO ENVIRONMENTAL ASPECTS OF DOE OPERATIONS

Need for Improved Responsiveness to Problems at DOE Sites (GAO/RCED-90-101, Mar. 1990).

Efforts to Improve DOE's Management of the Nuclear Weapons Complex (GAO/T-RCED-90-64, Mar. 1990).

GAO's Views on DOE's 1991 Budget for Addressing Problems at the Nuclear Weapons Complex (GAO/T-RCED-90-33, Mar. 1990).

GAO's Views on DOE's Environmental Restoration and Waste Management Five-Year Plan (GAO/T-RCED-90-16, Nov. 1989).

DOE's Award Fees at Rocky Flats Do Not Adequately Reflect ES&H Problems (GAO/RCED-90-47, Oct. 1989).

Policy Implications of Funding DOE's K-Reactor Cooling Tower Project (GAO/RCED-89-212, Sept. 1989).

DOE's Management of Single-Shell Tanks at Hanford, Washington (GAO/RCED-89-157, July 1989).

Environmental Problems in the Nuclear Weapons Complex (GAO/T-RCED-89-18, Apr. 1989).

Problems Associated With DOE's Inactive Waste Sites (GAO/RCED-88-169, Aug. 1988).

Dealing With Problems in the Nuclear Defense Complex Expected to Cost Over $100 Billion (GAO/RCED-88-197BR, July 1988).

Environmental Funding: DOE Needs to Better Identify Funds for Hazardous Waste Compliance (GAO/RCED-88-62, Dec. 1987).

Environmental, Safety, and Health Oversight of DOE's Operations (GAO/T-RCED-87-12, Mar. 1987).

Environmental, Safety, and Health Aspects of DOE's Nuclear Defense Complex (GAO/T-RCED-87-4, Mar. 1987).

Nuclear Waste: Unresolved Issues Concerning Hanford's Waste Management Practices (GAO/RCED-87-30, Nov. 1986).

Nuclear Energy: Environmental Issues at DOE's Nuclear Defense Facilities (GAO/RCED-86-192, Sept. 1986).

II

101st CONGRESS
1st Session

S. 1462

To create a Federal nuclear facility environmental response fund, to create an Office of Environmental Management and Remedial Action, to require the Secretary of Energy and the Administrator of the Environmental Protection Agency to cooperate with affected States and Indian tribes, to provide for research and development to address environmental problems at Federal nuclear facilities, and for other purposes.

IN THE SENATE OF THE UNITED STATES

AUGUST 1 (legislative day, JANUARY 3), 1989

Mr. ADAMS (for himself, Mr. WIRTH, Mr. REID, Mr. METZENBAUM, Mr. FOWLER, Mr. CRANSTON, Mr. SANFORD, Mr. BRYAN, Mr. MOYNIHAN, Mr. GORE, Mr. LIEBERMAN, Mr. DASCHLE, and Mr. HATFIELD) introduced the following bill; which was read twice and referred to the Committee on Environment and Public Works

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A BILL

To create a Federal nuclear facility environmental response fund, to create an Office of Environmental Management and Remedial Action, to require the Secretary of Energy and the Administrator of the Environmental Protection Agency to cooperate with affected States and Indian tribes, to provide for research and development to address environmental problems at Federal nuclear facilities, and for other purposes.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

SECTION 1. SHORT TITLE.

This Act may be cited as the "Federal Nuclear Facilities Environmental Response Act".

SEC. 2. PURPOSES.

The purposes of this Act are the following:

(1) To provide an adequate, assured long-term source of funding for environmental restoration, decontamination, decommissioning, and long-term management of Federal nuclear facilities and sites.

(2) To provide for the compliance of Federal nuclear facilities and sites under the jurisdiction of the Secretary of Energy with applicable Federal environmental laws.

(3) To restore the environment affected by releases of hazardous and nuclear materials from Federal nuclear facilities within 30 years.

(4) To characterize, stabilize, retrieve, and dispose of high-level radioactive waste and transuranic waste currently stored at Federal nuclear facilities.

(5) To provide for the timely decontamination, decommissioning, and long-term management and monitoring of Federal nuclear facilities and sites.

(6) To provide for cooperation and consultation between the Federal Government and States and Indian tribes affected by environmental compliance and restoration activities at Federal nuclear facilities and

sites, including transportation of radioactive and hazardous materials resulting from those activities.

(7) To provide research and development necessary for the environmental restoration, decommissioning, and long-term management of Federal nuclear facilities and sites.

SEC. 3. ENFORCEMENT OF FEDERAL ENVIRONMENTAL LAW.

Nothing in this Act shall be construed to modify or restrict the obligation of the Administrator (or a State to which regulatory authority has been delegated under Federal environmental law) to enforce, or the obligation of the Secretary to comply with, Federal environmental law.

SEC. 4. NATIONAL SECURITY INFORMATION.

Nothing in this Act shall authorize the release or disclosure of classified national security information to any person, including the Administrator and the Nuclear Regulatory Commission, except as provided by other law.

SEC. 5. DEFINITIONS.

For the purposes of this Act:

(1) The term "Administrator" means the Administrator of the Environmental Protection Agency.

(2) The term "affected State or Indian tribe" means a State or Indian tribe that—

(A) has within its borders or contiguous to one of its borders a Federal nuclear facility or site;

(B) has within its boundaries or contiguous to one of its boundaries a major river, waterway, or underground aquifer that is within or contiguous to such a facility or site; or

(C) in the case of an Indian tribe, possesses treaty rights to lands or surface or subsurface waters that lie within or are contiguous to such a facility or site.

(3) The term "affected transportation corridor State or Indian tribe" means a State or Indian tribe within whose State or reservation boundaries is a transportation corridor used for radioactive or hazardous wastes resulting from the activities authorized by this Act.

(4) The terms "byproduct material", "source material", and "special nuclear material" have the meanings given such terms by subsections e, z, and aa of section 11 of the Atomic Energy Act of 1954 (42 U.S.C. 2014).

(5) The term "Director" means the Director of the Office of Environmental Management and Remedi-

al Action of the Department of Energy established by section 205.

(6) The term "environmental restoration" means—

(A) the removal of hazardous and radioactive materials to background levels or to applicable Federal or State standards, both on-site and off-site, that have been released into the environment, including air, surface and subsurface water, and land; and

(B) the decontamination of facilities.

(7) The term "Federal environmental law" includes—

(A) the Atomic Energy Act of 1954 (42 U.S.C. 2011 et seq.);

(B) the Clean Air Act (42 U.S.C. 7401 et seq.);

(C) the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (42 U.S.C. 9601 et seq.) (in this Act referred to as "CERCLA");

(D) the Federal Water Pollution Control Act (33 U.S.C. 1251 et seq.);

(E) the Marine Protection, Research, and Sanctuaries Act of 1972 (33 U.S.C. 1401 et seq.);

(F) the Safe Drinking Water Act (42 U.S.C. 300f et seq.);

(G) the Solid Waste Disposal Act (42 U.S.C. 6901 et seq.); and

(H) the Toxic Substances Control Act (15 U.S.C. 2601 et seq.).

(8)(A) The term "Federal nuclear facility" means—

(i) a production facility or a utilization facility, as defined by subsections v and cc, respectively, of section 11 of the Atomic Energy Act of 1954 (42 U.S.C. 2014);

(ii) a facility for the storage or disposal of hazardous or radioactive materials that is owned by the Department of Energy, including soil discharge facilities; and

(iii) any other facility or site subject to the Atomic Energy Act of 1954 which is subject to the control of, or under the jurisdiction of, the Secretary of Energy.

(B) Such term does not include—

(i) a naval nuclear propulsion program facility within the jurisdiction of the Department of Energy as pursuant to section 309 of the Department of Energy Organization Act (42 U.S.C. 7158); or

(ii) a facility developed pursuant to the Nuclear Waste Policy Act of 1982 (42 U.S.C. 10101 et seq.).

(9) The term "Fund" means the Federal Nuclear Facilities Environment Response Fund established by section 101.

(10) The term "hazardous material" means material that is regulated and controlled as a hazardous substance under CERCLA (42 U.S.C. 9601(14)) or as a hazardous waste under the Solid Waste Disposal Act (42 U.S.C. 6903(5)).

(11) The term "high-level radioactive waste" has the meaning given that term in section 2(12) of the Nuclear Waste Policy Act of 1982 (42 U.S.C. 10101(12)).

(12) The term "Indian tribe" means an Indian tribe, band, nation, or other organized group or community of Indians, including a Native village described in section 3(c) of the Alaska Native Claims Settlement Act (43 U.S.C. 1602(c)), which is recognized as eligi-

ble for the services provided to Indians by the Secretary of the Interior because of their status as Indians.

(13) The term "penalties" means fines, fees, monetary judgments, and monetary damages resulting from regulatory enforcement or litigation stemming from Federal environmental laws or this Act.

(14) The term "Secretary" means the Secretary of Energy.

(15) The term "transuranic waste" means material contaminated with elements that—

(A) have an atomic number greater than 92, including neptunium, plutonium, americium, and curium; and

(B) are in concentrations greater than 10 nanocuries per gram, or in such other concentrations as the Nuclear Regulatory Commission may prescribe to protect the public health and safety.

TITLE I—FEDERAL NUCLEAR FACILITY ENVIRONMENTAL RESPONSE FUND

SEC. 101. ESTABLISHMENT OF ENVIRONMENTAL RESPONSE FUND.

(a) ESTABLISHMENT OF THE FUND.—(1) There is established in the Treasury of the United States a separate fund to be known as the "Federal Nuclear Facilities Environmental Response Fund".

(2) The Fund shall consist of such amounts as may be—

(A) appropriated and transferred to the Fund as provided in subsections (b) and (c);

(B) transferred to the Fund as provided in subsection (d); and

(C) credited to the Fund as provided in subsection (e)(2)(C).

(b) INTERIM FUNDING.—(1) There are appropriated and transferred to the Fund, out of funds in the Treasury not otherwise appropriated, amounts determined by the Secretary of the Treasury to be equivalent to any amount appropriated pursuant to paragraph (2).

(2) There is authorized to be appropriated to the Secretary for appropriation into the Fund under paragraph (1), in lieu of any funds that prior to the date of enactment of this Act may have been authorized to be appropriated to the Secretary for defense waste management environmental restoration and compliance activities such as those authorized by this Act, $2,500,000,000 for fiscal year 1991, $3,700,000,000 for fiscal year 1992, and for each fiscal year thereafter such sums as may be necessary to carry out this Act.

(3) Any unobligated balances appropriated prior to the date of enactment of this Act for defense waste management and environmental restoration and compliance activities such as those authorized by this Act shall be transferred to the Fund not later than 30 days after the date of enactment of this Act.

(c) TRANSFER OF PENALTIES.—(1) There are appropriated and transferred to the Fund, out of funds in the Treasury not otherwise appropriated, amounts determined by the Secretary of the Treasury to be equivalent to the amounts received in the Treasury attributable to collections of penalties and other amounts as described in paragraph (2).

(2) The amounts appropriated by paragraph (1) are amounts equivalent to the following penalties and other amounts assessed against the Department of Energy or any contractor of the Department of Energy operating a Federal nuclear facility, for actions resulting from the operation of a Federal nuclear facility or site containing such facility:

(A) Amounts recovered on behalf of the Superfund under CERCLA (42 U.S.C. 9601 et seq.).

(B) Penalties assessed under title I of CERCLA.

(C) Punitive damages collected under section 107(c)(3) of CERCLA.

(D) Penalties assessed under section 3008 of the Solid Waste Disposal Act (42 U.S.C. 6928).

(E) Penalties assessed under section 16 of the Toxic Substances Control Act (15 U.S.C. 2615).

(F) Penalties assessed under section 1414 of the Safe Drinking Water Act (42 U.S.C. 300g–3).

(G) Penalties assessed under section 113 of the Clean Air Act (42 U.S.C. 7413).

(H) Moneys recovered or collected under section 311(b)(6)(B) of the Federal Water Pollution Control Act (33 U.S.C. 1321).

(I) Penalties assessed under section 309 of the Federal Water Pollution Control Act (33 U.S.C. 1319).

(3) The amounts appropriated by paragraph (1) shall be transferred annually from the general fund of the Treasury to the Fund.

(4)(A) A penalty or other amount described in paragraph (2) that is assessed against the Department of Energy shall be paid out of the operating budget of the Department of Energy for the activity that resulted in the assessment and not out of any other account of the Federal budget (including an account under section 1304 of title 31, United States Code).

(B)(i) A penalty or other amount described in paragraph (2) that is assessed against a contractor of the Department of

Energy shall be paid by the contractor and not by the Department of Energy.

(ii) In order to effect payment of a penalty or other amount by a contractor the Secretary of Energy may deduct an appropriate amount from an award fee owed to the contractor and pay the penalty or other amount on behalf of the contractor.

(iii) A provision in a contract between the Secretary of Energy and a contractor that purports to indemnify a contractor, hold a contractor harmless, or otherwise protect a contractor against liability for action by the contractor that results in assessment of a penalty or other amount described in paragraph (2)—

(I) is void as against public policy;

(II) shall not be performed or complied with by the Secretary of Energy; and

(III) shall not be enforceable by the contractor.

(d) TRANSFERS FROM FEDERAL AGENCIES.—The Secretary of the Treasury shall transfer quarterly into the Fund amounts described in section 102(d).

(e) MANAGEMENT OF THE FUND.—(1) The Secretary of the Treasury shall report to the Congress each fiscal year ending on or after September 30, 1990, on the financial condition and results of the operation of the Fund during the preceding fiscal year and on its expected condition and operations during the coming fiscal year.

(2)(A) The Secretary of the Treasury shall invest such portion of the Fund as is not required to meet current withdrawals in interest-bearing obligations of the United States acquired—

(i) on original issue at the issue price, or

(ii) by purchase of outstanding obligations at the market price.

(B) Obligations acquired for the Fund may be sold by the Secretary of the Treasury at the market price.

(C) Interest on and proceeds of the sale or redemption of obligations held for the Fund shall be credited to and form a part of the Fund.

(f) EXPENDITURES FROM THE FUND.—(1) Amounts in the Fund shall be available to the Secretary and the Administrator, as provided in appropriation Acts, for purposes of making expenditures to carry out activities described in section 102(a) and for no other purpose.

(2) Amounts in the Fund shall remain available until expended.

(g) SEPARATE BUDGET ACCOUNT.—The Secretary shall establish a budget account for the Fund, under the Director of the Office of Environmental Management and Remedial Action, which shall be included as a separate budget account in the budget submitted each fiscal year by the President in accordance with chapter 11 of title 31, United States Code.

(h) NOTIFICATION OF INSUFFICIENT FUNDS.—If at any time the funds available in the Fund are insufficient to enable the Secretary and the Administrator to discharge their responsibilities under this Act, the Secretary shall issue a determination of insufficiency to the Secretary of the Treasury and report such determination to the Congress, identifying the amount of additional funds needed to carry out the obligations of the Secretary and the Administrator under this Act.

SEC. 102. ALLOCATION AND RECOVERY OF COSTS.

(a) BUDGET PLAN FOR ACTIVITIES.—(1) The Secretary, with the consultation and concurrence of the Secretary of the Treasury and the Administrator, and after consultation with affected States and Indian tribes and affected transportation corridor States and Indian tribes, shall prepare a budget plan for the timely completion of the following:

(A) Characterization, stabilization, retrieval, treatment, packaging, and transport of high-level radioactive and transuranic wastes generated or stored at Federal nuclear facilities in compliance with Federal environmental law.

(B) Disposal of transuranic wastes.

(C) Disposal of high-level wastes generated by the Department of Energy as determined pursuant to the Nuclear Waste Policy Act of 1982 (42 U.S.C. 10101).

(D) Remedial investigations and surveys and response actions under CERCLA (42 U.S.C. 9601 et seq.) and corrective actions under subsections (u) and (v) of section 3004 of the Solid Waste Disposal Act (42 U.S.C. 6924) at Federal nuclear facilities.

(E) Decommissioning, decontamination, long-term monitoring and long-term care of Federal nuclear facilities.

(F) Grants to affected States and Indian tribes and affected transportation corridor States and Indian tribes.

(G) Research and development under the program established by title III.

(H) Evaluation and mitigation of releases of radioactive and hazardous materials to off-site areas affecting property and populations adjacent to Federal nuclear facilities.

(I) Activities to bring Federal nuclear facilities into compliance with Federal environmental law.

(J) Activities of the Office of Environmental Management and Remedial Action pursuant to this Act relating to Federal nuclear facilities.

(2) The budget plan required by paragraph (1) shall be based on the site-specific surveys and plans required by subtitle A of title II.

(3) The budget plan required by paragraph (1) shall be prepared in preliminary form not later than 6 months after the date of enactment of this Act, and thereafter the Secretary shall submit the plan to Congress annually at the same time as the budget of the Department of Energy is submitted in accordance with chapter 11 of title 31, United States Code.

(b) ALLOCATION OF COSTS.—(1) Not later than 1 year after the date of enactment of this Act, the Secretary shall promulgate by rule, pursuant to section 553 of title 5, United States Code, a methodology for allocating costs, proportionately among the entities listed in paragraph (3), based on—

(A) total program costs identified in budgets prepared pursuant to subsection (a);

(B) annual funding requirements of the Secretary necessary to comply with Federal environmental law and this Act; and

(C) other authorized costs of carrying out the requirements of this Act as they relate to Federal nuclear facilities and sites containing such facilities, including the provision of grants pursuant to title II.

(2) The proportionate share of costs specified pursuant to paragraph (1) shall be based on the site-specific costs for Federal nuclear facilities and sites of environmental restoration, compliance, decommissioning, and long-term surveillance to be incurred by the Department of Energy. These costs shall be allocated on a proportionate basis to each entity identified in paragraph (3) based on—

(A) the degree to which each activity and facility of the Department of Energy has resulted in such costs being incurred in providing specific services or use of specific facilities or sites to Department of Energy programs and to private and government entities other than the Department of Energy; and

(B) the degree to which the entities identified in paragraph (3) participated in, utilized, or contracted for services from such activity or facility and the level of usage by each such entity of services or usage provided by the Department of Energy to the entity (such as uranium enrichment services).

(3) The entities among which costs shall be allocated are the following:

(A) The Department of Energy, with costs allocated proportionately among budget accounts for atomic energy defense activities, the civilian nuclear energy program, energy research and uranium enrichment and radioisotope programs, and such other programs of the Department of Energy as the Secretary determines to be appropriate to recover costs related to such programs.

(B) Other departments and agencies of the Federal Government that obtain nuclear-related services from the Department of Energy or use nuclear facilities or sites under the jurisdiction of the Secretary, including waste management, naval reactor decommissioning and disposal, and uranium enrichment services.

(C) Commercial and other non-Federal entities that purchase nuclear-related services of the Department of Energy or are the beneficiary of nuclear-related activities of the Department of Energy, including—

(i) uranium enrichment services;

(ii) uranium mill tailings reclamation and long-term management;

(iii) low-level and transuranic radioactive waste management, disposal, and long-term management;

(iv) isotope production and distribution; and

(v) the basic research user facilities program and other research activities.

(4) With public notice and comment, the Secretary shall annually review the methodology established pursuant to

paragraph (1) to assure adequate funding and equitable apportionment of costs.

(c) REIMBURSEMENT BY FEDERAL AGENCIES.—(1)(A) Each fiscal year the Secretary shall notify each Federal department and agency described in subsection (b)(3) (A) and (B) of its proportionate share of the costs of the activities described in subsection (a)(1) for the following fiscal year and an estimate for future years.

(B) The head of each department and agency notified of its proportionate share of costs pursuant to subparagraph (A) shall reflect its proportionate share of costs in the budget of such department or agency for such fiscal year submitted in accordance with chapter 11 of title 31, United States Code.

(C) Each department and agency (other than the Department of Energy) shall reimburse the Secretary of Energy for its proportionate share of costs for such fiscal year from amounts appropriated to the department or agency for such share of costs for such fiscal year.

(2) Under regulations issued pursuant to section 553 of title 5, United States Code, the Secretary shall assess and collect from each commercial and other non-Federal entity described in subsection (b)(3)(C) a user fee for purposes of recovering such entity's proportionate share of the costs of the activities described in subsection (a)(1).

(d) TRANSFERS TO FUND.—The Secretary shall transfer quarterly into the Fund—

(1) amounts reimbursed to the Secretary under subsection (c)(1);

(2) amounts equivalent to the fees collected under subsection (c)(2);

(3) amounts allocated to the Department of Energy by the Secretary under subsection (a) as the Department of Energy's proportionate share of costs;

(4) amounts received by the Secretary for costs associated with the disposal of low-level radioactive waste that is the responsibility of the Federal Government under section 3(b) of the Low-Level Radioactive Waste Policy Act (42 U.S.C. 2021c);

(5) amounts received by the Secretary for the costs of long-term monitoring and maintenance of commercial low-level waste disposal facilities transferred to the Secretary pursuant to section 151(b) of the Nuclear Waste Policy Act of 1982 (42 U.S.C. 10171(b)); and

(6) amounts received by the Secretary for costs associated with the long-term monitoring and maintenance of uranium mill tailings and lands transferred to the Secretary pursuant to section 104(f) of the Uranium Mill Tailings Radiation Control Act of 1978 (42 U.S.C. 7914(f)).

TITLE II—ENVIRONMENTAL MANAGEMENT AND REMEDIAL ACTION

Subtitle A—Plans for Compliance with Federal Environmental Law

SEC. 201. ENVIRONMENTAL BASELINE SURVEYS.

(a) IN GENERAL.—As soon as practicable, but not later than 1 year after the date of the enactment of this Act, the Assistant Secretary of the Department of Energy responsible for environmental protection shall conduct and complete an environmental baseline survey of each site containing a Federal nuclear facility.

(b) CONTENT OF ENVIRONMENTAL BASELINE SURVEYS.—An environmental baseline survey shall—

(1) identify all Federal nuclear facilities on the site;

(2) inventory existing quantities and concentrations of hazardous material in storage and disposal facilities on the site;

(3) identify the level of compliance of the site with Federal environmental law;

(4) inventory all previous and current releases into the environment of hazardous or radioactive materials at or from the site;

(5) identify off-site properties, aquifers, bodies of water, and populations that have been contaminated by or exposed to hazardous or radioactive materials released from the site;

(6) identify and describe site management activities currently being conducted to correct or mitigate such releases or contamination;

(7) describe the status of efforts to characterize, treat, stabilize, and dispose of high-level radioactive waste and transuranic waste at the site;

(8) specify the quality control and assurance programs and confidence levels applicable to the data contained in the survey; and

(9) include such other information as the Assistant Secretary considers appropriate.

(c) USE OF PRIOR DATA.—In the preparation of an environmental baseline survey under subsection (a), the Secretary may use preexisting environmental data and studies if—

(1) the quality control and assurance procedures utilized in the collection and analysis of such data or studies were adequate;

(2) the data and studies remain valid despite the passage of time or changes in circumstances; and

(3) the Secretary makes a specific finding to that effect.

(d) PERIODIC REVISION.—An environmental baseline survey shall be revised at appropriate intervals, but not less often than every 5 years.

(e) AVAILABILITY.—An environmental baseline survey shall be provided to the Administrator and to the affected States and Indian tribes and shall be made available to any other person on request.

SEC. 202. COMPLIANCE PLANS.

(a) IN GENERAL.—Not later than 6 months after completion of a site-specific environmental baseline survey under section 201, the Secretary, in consultation with the Administrator and affected States and Indian tribes, shall develop a compliance plan to bring each such site or facility into timely and full compliance with Federal environmental law and State environmental law.

(b) CONTENT OF COMPLIANCE PLAN.—A compliance plan shall specify—

(1) required actions that the Secretary will take in order to bring the site into compliance with Federal environmental law, including a full description of and schedule for completing such actions;

(2) a description of compliance activities, including enforcement activities, being taken by the Administra-

tor or a State at the site, including a full description of and schedule for completing any corrective actions that the Administrator or the State has required;

(3) determination of the costs of such compliance activities, including total and estimated annual costs;

(4) a program for quality control and assurance;

(5) a program of environmental inspection and monitoring to confirm compliance; and

(6) such other items as the Secretary considers appropriate.

(c) PERIODIC REVISION.—A compliance plan shall be revised at appropriate intervals, but not less often than every 5 years unless, after public notice and comment and with the concurrence of the Administrator and affected States and Indian tribes, the Secretary determines that revision is unnecessary.

SEC. 203. SITE MANAGEMENT PLANS.

(a) IN GENERAL.—Not later than 18 months after the date of the enactment of this Act, the Secretary, in consultation with the Administrator and affected States and Indian tribes, shall prepare a site management plan for each Federal nuclear facility and site.

(b) CONTENT OF SITE MANAGEMENT PLANS.—A site management plan shall—

(1) prescribe management and corrective actions for the characterization, stabilization, retrieval, treatment, and disposal of high-level radioactive wastes and transuranic wastes at the site;

(2) provide for timely decontamination and decommissioning of the facility and site;

(3) provide for long-term management of the facility and site, both before and after decontamination and decommissioning, including long-term maintenance and monitoring of the facility and site;

(4) include plans, work procedures and schedules, institutional arrangements, and budget outlay schedules for carrying out the activities described in paragraphs (1), (2), and (3) at the site;

(5) describe the health and environmental protection impacts and goals of carrying out those activities at the site and applicable regulatory standards;

(6) provide estimates of radiation exposures and risk to occupational workers involved in carrying out those activities at the site and to the public;

(7) establish priorities for implementation of the plan;

(8) describe quality control and assurance programs and procedures;

(9) describe environmental monitoring measures; and

(10) address such other matters as the Secretary considers appropriate.

(c) PERIODIC REVISION.—A site management plan shall be revised at appropriate intervals, but not less often than every 5 years unless, after public notice and comment and with the concurrence of the Administrator and affected States and Indian tribes, the Secretary determines that revision is unnecessary.

SEC. 204. PROVISIONS APPLICABLE TO COMPLIANCE PLANS AND SITE MANAGEMENT PLANS.

(a) IMPLEMENTATION OF PLANS.—The Secretary shall implement the compliance plans required by section 202 and site management plans required by section 203 with the concurrence of the affected States and Indian tribes and the Administrator.

(b) AGREEMENTS.—(1) An agreement that—

(A) is among the Administrator, the Secretary, and a State to which the Administrator has delegated regulatory authority under Federal environmental law; and

(B) provides for the implementation of Federal environmental law or management or treatment of radioactive wastes or facilities at a Federal nuclear facility, may be deemed to satisfy, in whole or in part, the requirements of sections 202 and 203 if the agreement meets the requirements of paragraph (2).

(2) The requirements that an agreement must meet for purposes of paragraph (1) are the following:

(A) The agreement is substantially consistent with the requirements of sections 202 and 203.

(B) The parties to the agreement concur that the agreement satisfies those requirements.

(3) Not later than 45 days after the date of enactment of this Act, the Secretary, after public notice and comment and with the concurrence of the Administrator and affected States and Indian tribes, shall complete a review of all site-specific agreements for the application of Federal environmental law to, management of, or environmental restoration of Federal nuclear facilities entered into before the date of enactment of this Act and shall determine the extent to which such agreements may be deemed to satisfy the requirements of section 202 or 203.

(c) PUBLIC NOTICE AND COMMENT.—(1) Prior to the initiation of an action required by section 202 or 203, the Secretary shall publish a notice of intention to initiate such action and shall solicit public comment on the scope and content of each survey or plan.

(2) At least 45 days before adoption of a survey or plan required by section 202 or 203, the Secretary shall provide public notice of such proposed plan, make a copy of the survey or plan available to the public, and solicit comments on the proposed survey or plan.

Subtitle B—Office of Environmental Management and Remedial Action

SEC. 211. ESTABLISHMENT OF OFFICE.

(a) In General.—There is established in the Department of Energy an Office of Environmental Management and Remedial Action (in this subtitle referred to as the "Office") to consolidate the waste management, remedial, environmental, and decommissioning programs related to Federal nuclear facilities within the Department and improve the efficiency, cost-effectiveness, budgeting, and accountability of those programs.

(b) Director.—The Office shall be headed by a Director who shall be appointed by the President, by and with the advice and consent of the Senate, and who shall be compensated at the rate payable for level IV of the Executive Schedule under section 5315 of title 5, United States Code.

(c) Functions.—The Director shall be responsible for carrying out the functions of the Secretary under this Act and, notwithstanding any other provision of law, shall also be responsible for the Department of Energy's remedial action and waste technology programs, other than those assigned to the Office of Civilian Radioactive Waste Management by section 304 of the Nuclear Waste Policy Act of 1982 (42 U.S.C. 10224) including each of the following:

(1) The Uranium Mill Tailings Remedial Action Program required by the Uranium Mill Tailings Radiation Control Act of 1978 (42 U.S.C. 7091 et seq.) and land and byproduct material transferred to the United States under section 83(b) of the Atomic Energy Act of 1982 (42 U.S.C. 2113(b)).

(2) Low-level radioactive waste and land to which the Secretary has assumed title and of which the Secretary has assumed custody under section 151(b) of the Nuclear Waste Policy Act of 1982 (42 U.S.C. 10171(b)).

(3) Residual radioactive materials and lands that are transferred to the United States under section 104(f) of the Uranium Mill Tailings Radiation Control Act of 1978 (42 U.S.C. 7914(f)).

(4) Facilities for the disposal of low-level radioactive waste that is the responsibility of the Federal Government under section 3(b) of the Low-Level Radioactive Waste Policy Act (42 U.S.C. 2021c(b)).

(5) The West Valley demonstration project carried out under the West Valley Demonstration Project Act (42 U.S.C. 2021a note).

(6) The Formerly Utilized Sites Remedial Action Program.

(7) The Surplus Facilities Management Program.

(8) The Shippingport Station Decommissioning Project.

(d) ANNUAL REPORT.—(1) Not later than January 15 of each year, the Director shall submit to Congress a report on the environmental compliance, management, and remedial activities of the Office.

(2) The report required by paragraph (1) shall include—

(A) a status report on the actions that need to be taken at each site containing a Federal nuclear facility in order to bring the site into compliance with Federal environmental law;

(B) a status report on management and remedial activities;

(C) a status report on research and development activities;

(D) a determination of the amount of funds necessary to carry out the actions at the sites, including an outlay schedule for each site for the next 5 fiscal years; and

(E) such other items as the Director considers appropriate.

Subtitle C—Notification and Participation of Affected States and Indian Tribes

SEC. 221. OBLIGATIONS OF THE FEDERAL GOVERNMENT.

(a) In General.—In the execution of the activities necessary to bring Federal nuclear facilities into compliance with Federal environmental law and in the execution of any other actions for the decommissioning, decontamination, long-term care, and monitoring of Federal nuclear facilities, and transportation related thereto, and in fulfillment of the requirements of this Act, the Secretary and the Administrator shall consult with, and ensure the participation of—

(1) affected States and Indian tribes; and

(2) with regard to related transportation activities, affected transportation corridor States and Indian tribes.

(b) Notification.—(1) Not later than 90 days after the date of the enactment of this Act, the Secretary shall—

(A) notify affected States and Indian tribes of the existence of Federal nuclear facilities within their territories; and

(B) inform them of the procedures that the Secretary and the Administrator will use in carrying out this title.

(2) Not later than 90 days after the date of enactment of this Act, the Secretary shall—

(A) notify affected transportation corridor States and Indian tribes of the existence of a transportation corridor within their territories to be utilized for activities required by this Act; and

(B) inform them of the procedures that the Secretary and the Administrator will use in carrying out this title.

(3) If, after making the notifications required by paragraphs (1) and (2), the Secretary or the Administrator determines that additional Federal nuclear facilities or transportation corridors are located within any State or within the jurisdiction of any Indian tribe, the Secretary shall notify such affected State or Indian tribe or affected transportation corridor State or Indian tribe not later than 30 days after the determination is made.

(4) The notification provided pursuant to this subsection is for the purpose of general information only and shall not be deemed to constitute notice under any other law or for any other purpose.

(c) Requests for Information.—Upon written request by the Governor of an affected State or by the governing body of an affected Indian tribe for information pertinent to a Federal nuclear facility or transportation corridor, the Secretary shall provide a written response to such request no later than 30 days after receipt of the request.

SEC. 222. GRANTS TO AFFECTED STATES AND TRIBES.

(a) In General.—The Secretary shall make grants from the Fund to an affected State or Indian tribe notified under section 221 for the following purposes:

(1) To negotiate agreements with the Federal Government pertaining to remedial environmental and compliance activities at Federal nuclear facilities.

(2) To independently monitor, test, and evaluate Federal nuclear facilities and sites for the purpose of determining the extent of environmental contamination at such facilities and sites and the extent of compliance with Federal environmental law at such facilities and sites.

(3) To evaluate the existing and potential public health and safety, economic, and environmental impacts of environmental releases.

(4) To educate the public regarding compliance with this title and the activities of the respective Fed-

eral, State, and tribal authorities in carrying out this title.

(5) To request information about, or comment upon, recommendations, surveys, and reports required of the Secretary and Administrator under this Act.

(6) To evaluate the effect on public health and safety of, and the economic and environmental impacts of, the transportation of hazardous and radioactive wastes resulting from remedial, corrective, decontamination, and other activities conducted pursuant to this Act.

(b) GRANTS TO STATES WITH DELEGATED REGULATORY AUTHORITY.—The Secretary, with the consultation and concurrence of the Administrator, shall make grants from the Fund to an affected State to which the Administrator has delegated regulatory under Federal environmental law for execution of that authority with respect to Federal nuclear facilities located in the State.

SEC. 223. GRANTS TO AFFECTED TRANSPORTATION CORRIDOR STATES AND INDIAN TRIBES.

(a) IN GENERAL.—The Secretary shall make grants from the Fund to an affected transportation corridor State or Indian tribe notified under section 221 for the following purposes:

(1) To negotiate agreements with the Federal Government pertaining to transportation activities of the Secretary related to the environmental management and restoration of Federal nuclear facilities and sites.

(2) To evaluate the existing and potential public health and safety, economic, and environmental impacts and risks associated with such transportation.

(3) To support emergency response planning related to such transportation.

(4) To educate the public regarding the activities of the Secretary pursuant to this Act, in general, and regarding the transportation of nuclear materials in particular.

(5) To request information about or comment upon the activities of the Secretary pursuant to this Act.

TITLE III—RESEARCH AND DEVELOPMENT FOR ENVIRONMENTAL RESTORATION AND MANAGEMENT OF FEDERAL NUCLEAR FACILITIES

SEC. 301. COORDINATION AGREEMENT.

(a) AGREEMENT.—Not more than 180 days after the date of the enactment of this Act, the Administrator and the Secretary shall enter into a coordination agreement for the purpose of coordinating research and developing technologies for—

(1) the application of, and compliance with, Federal environmental law at Federal nuclear facilities and sites;

(2) the decontamination and decommissioning of Federal nuclear facilities; and

(3) the characterization, retrieval, treatment, and stabilization of hazardous and nuclear materials at Federal nuclear facilities and sites.

(b) CONTENTS OF AGREEMENT.—The coordination agreement required by subsection (b) shall provide for—

(1) utilization and allocation of research facilities and resources of the Environmental Protection Agency and the Department of Energy, including activities authorized by section 311 of CERCLA (42 U.S.C. 9660);

(2) creation of a coordinating committee comprised of officials of the Environmental Protection Agency and the Department of Energy;

(3) establishment of independent external scientific and peer review procedures;

(4) establishment of procedures for transfer of technology and field application of research and demonstrations consistent with section 303; and

(5) establishment of procedures for the preparation of budgets for such activities consistent with section 302.

(c) SITE-SPECIFIC AGREEMENTS.—In carrying out this section, the Administrator and the Secretary may enter into site-specific coordination agreements in addition to the coordination agreement required by subsection (a).

SEC. 302. RESEARCH AND DEVELOPMENT FUNDING.

(a) BUDGET REQUEST.—(1) The Secretary and the Administrator shall each submit annually a Federal nuclear facilities environmental research and development budget, prepared pursuant to section 301(b)(5), to the Office of Management and Budget, as a separate part of the budgets of the Department of Energy and the Environmental Protection Agency, respectively, in accordance with section 1105 of title 31, United States Code.

(2) A budget submitted pursuant to paragraph (1) shall reflect the annual required research and development expenditures of the Secretary and the Administrator and state estimates for the succeeding 3 fiscal years as determined under the coordination agreement entered into under section 301.

(b) USE OF THE FUND.—The Secretary and the Administrator shall make expenditures from the Fund for the purpose of conducting the research and development program jointly established by this title, including any site-specific agreements.

SEC. 303. TECHNOLOGY TRANSFER.

(a) IN GENERAL.—In carrying out the research and development program established under this title, the Administrator and the Secretary shall, to the extent practicable, disseminate to the public such information and transfer such technologies as are developed.

(b) COMMERCIAL APPLICATIONS.—The Secretary and the Administrator shall jointly designate or establish a program to transfer such information and technologies as are susceptible of commercial application. The administrative cost of such a program shall be paid from the Fund.

SEC. 304. CONTRACTS AND RESEARCH GRANTS.

(a) AUTHORITY.—(1) In carrying out this title, the Secretary and the Administrator may enter into contracts and cooperative agreements with, and make grants to, the persons and entities described in subsection (b).

(2) Expenditures to support activities under this section may be made from the Fund.

(b) ELIGIBLE ENTITIES.—The persons who may enter into contracts and cooperative agreements with, and receive grants from, the Secretary and the Administrator under subsection (a) are—

(1) public entities;

(2) nonprofit private entities described in section 501(c)(3) of the Internal Revenue Code of 1986 exempt from taxation under section 501(a) of the Internal Revenue Code of 1986;

(3) other individuals or entities; and

(4) agencies, departments, and instrumentalities of the United States.

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